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# Family Economics Review

1986  
No.1

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# Family Economics Review

1986 No. 1

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Issued February 1986

# Federal Sources of Family Economic Data

By Frankie N. Schwenk  
*Family economist*

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The Federal Government collects, analyzes, and disseminates vast quantities of data. The data are used to assess status, measure trends, or provide a basis for policy and program decisions. They are collected with careful procedures, the samples often are large, the cost to users is low, and copyright restrictions do not apply.

The availability and easy accessibility of Federal data provide family economists with extensive information useful in addressing family economic issues. Of particular interest are data related to the economic well-being of families and individuals (for example, income, assets, and expenditures), the economy (prices and unemployment), and population characteristics (age distribution, family composition, and mobility).

This article outlines major sources of family economic data available from Federal agencies and discusses considerations in the use of these data. It includes a Directory of Data Files and a Directory of Catalogs (pp. 6-12).

## TYPES AND SOURCES OF SURVEY DATA

Survey data are collected from households and individuals or from other sectors such as financial institutions and business establishments. Family economists usually analyze household surveys, but also use information from nonhousehold sectors for comparisons, so the Directory of Data Files includes some nonhousehold sector data (Flow of Funds, National Income and Product Accounts (NIPA), and Labstat files) in addition to the household surveys.

Data are available as microdata (individual responses usually available on computer tape) or summary data (totals or averages usually presented in printed tables).<sup>1</sup> All of the household surveys

listed in the directory have microdata tapes which contain responses from the individuals or households, allowing analysis of relationships between household characteristics and expenditures or other economic behavior. Primary published sources of summary data from these surveys are named in the directory. To obtain detailed ordering information for the microdata tapes or printed materials, contact the agency listed with the survey description. Addresses and phone numbers are in the accompanying Directory of Catalogs.

Several new data sources are available. The Survey of Income and Program Participation (SIPP) has extensive coverage of income, as well as labor force experience and participation in major government programs. Periodic questions add information on assets, liabilities, education, and other related topics. Each of the 20,000 households in the sample is interviewed every 4 months for a period of 2-1/2 years. The first interviews were in 1983. A new panel is initiated each year. Quarterly data are published in a Current Population Report (P-70) series and are available on microdata tapes.

Another continuing survey, the Consumer Expenditure Survey (CES), contains comprehensive expenditure data. Previously conducted once a decade, it now is conducted on a continuing basis, 20 percent of the sample being replaced each quarter. The 1980-81 data are available in microdata tapes and printed tables for both the interview survey and the diary survey. The interviews, conducted every 3 months for 5 collections, asked 5,000 respondents to recall major expenditures. The diary survey asked another 5,000 consumer units to record expenditures on frequently purchased small items for 2 weeks.

These two continuing surveys, SIPP and CES, and the ongoing Current Population Survey (CPS) provide much of the available national data on the economic status and trends of households. Adding to these are periodic and one-time studies such as the Survey of Consumer Finances, National Medical Care Utilization and Expenditure Survey, National Food Consumption Survey,

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<sup>1</sup>The use of the terms "microdata/summary data" is distinct from the use of the terms "microdata/macrosdata" to describe household and aggregate data.



Social Security New Beneficiary Survey, Residential Energy Consumption Survey, American Housing Survey, and others, many of which are described in the accompanying directory. Surveys on health, National Health Interview Survey (HIS) and National Health and Nutrition Examination Survey (HANES), and education, High School and Beyond (HS&B) and National Longitudinal Study of the High School Class of 1972 (NLS), are included in the Directory of Data Files because they provide data on human capital.

#### CONSIDERATIONS IN USE OF HOUSEHOLD SURVEY DATA

While many surveys make a contribution to the study of family economic well-being, it usually is difficult to compare or merge their results. For instance, SIPP, CES, and CPS all are representative of a national population and have data on income. However, the exact population represented and the definition of income vary among the three surveys. Thus, use and interpretation of survey data require attention to the survey design. What is the population and how is sampling done? What are the definitions of variables? How are weights applied? Are imputations and editing changes marked? Can waves be linked together to provide longitudinal data? A description of how these factors differ among surveys follows, including examples taken from surveys that are important to family economists--particularly, SIPP, CES, and CPS.

#### Units Included

**Population and sample.** CES, SIPP, and CPS have large samples (5,000 in the CES diary and 5,000 in the CES interview, 20,000 in each SIPP panel, and 60,000 in the CPS) and are collected on a continual basis. They are representative of the civilian, noninstitutional U.S. population. However, CES data represent only the urban population in 1981-84. Rural units were eliminated from the sample in October 1981, then reinstated in 1984. The populations are about 70

million consumer units for the 1980-81 CES surveys and 85 million households for the 1983 SIPP and CPS surveys.

#### **Metro-nonmetro, farm-nonfarm, urban-rural.**

New definitions for metropolitan areas were established by the Office of Management and Budget in 1983. New statistical areas were established, many area titles were changed, and geographic boundaries were redefined, primarily on the basis of the 1980 Census. Previously, Standard Metropolitan Statistical Areas (SMSA) and Standard Consolidated Statistical Areas (SCSA) had been the categories. The new definition has three categories: Metropolitan Statistical Area (MSA), Primary Metropolitan Statistical Area (PMSA), and Consolidated Metropolitan Statistical Area (CMSA). An MSA is an urban area that meets specified size criteria; a PMSA is an urban area within a very large metropolitan area; a CMSA is a combination of contiguous metropolitan areas.

SIPP designations of metropolitan-nonmetropolitan are based on the 1980 Census definition of Metropolitan Statistical Areas. Each MSA has one or more central counties containing the area's main population concentration, an urban area of at least 50,000 inhabitants. Farm population refers to residents living on farms where sale of crops, livestock, and other agricultural products amounted to \$1,000 or more during the previous 12 months.

CPS uses Standard Metropolitan Statistical Areas as defined by the 1970 Census, which defines an SMSA as a county or group of contiguous counties that contain at least one city (or twin cities) of 50,000 inhabitants or more. Contiguous counties are included if they are metropolitan in character and socially and economically integrated with the central city. In New England, SMSA's consist of towns and cities, rather than counties.

In CES, the urban population, as defined by BLS, comprises all persons living in SMSA's and in urbanized areas and urban places of 2,500 or more persons outside of SMSA's. Thus, households in the survey are classified as inside an SMSA or outside an SMSA.

**Geographic regions.** SIPP, CPS, and CES define geographic regions in the same way.<sup>2</sup> SIPP microdata tapes include codes for individual States and for MSA's and CMSA's. The State codes are included so that users can tabulate data by user-defined groupings of States. However, because estimates for individual States are subject to very high variance, analysis at this level is not recommended. The 1968-83 CPS microdata tape has (for all years since 1977) regions, all States and the District of Columbia, and 44 SMSA's.

**Consumer unit, household, family.** The microdata files of SIPP and CPS have three levels: Household, family, and person. A household consists of all persons who occupy a housing unit. Thus, a household could be a person living alone or a group of unrelated persons sharing a housing unit as partners, but not persons living in group quarters such as college dormitories or rooming and boarding houses. A family is a type of household consisting of two or more persons related by blood, marriage, or adoption, and residing together.

The basic reporting unit for CES is a consumer unit (CU). A CU consists of a family; or two or more persons living together who pool their income to make joint expenditure decisions; or a person living alone, sharing a household with others, or living as a roomer in a private home or lodging house or in permanent living quarters in a hotel or motel, but who is independent financially. To be considered financially independent, a respondent must provide two of three major

expense categories--housing, food, and other living expenses. There are more CU's than households because a CU counts unrelated people who live together as separate units if they are financially independent.

**Householder, reference person.** SIPP, CES, and CPS follow the 1980 Census definition of householder or reference person, that is, the first person in whose name the home is owned or rented. If the home is owned jointly by a married couple, the first person listed by the respondent becomes the reference person. The term "head of household" no longer is used.

### Variable Definitions

**Race and origin.** In SIPP and CPS, race may be white, black, or other. Origin, as identified by the respondent, is considered Spanish if the origin indicated is Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish origin, regardless of race. The CES asked for self-identification of race, and classified the responses into white; black; American Indian, Aleut, Eskimo; Asian or Pacific Islander; or other.

**Employment.** The CPS is the official source of labor force statistics, producing monthly statistics on unemployment and the labor force which are published by BLS as the household data section of its monthly bulletin, Employment and Earnings. The SIPP file also has labor force data. The SIPP data, however, can be analyzed with household characteristics, income, and program participation information; and the respondent's labor force activities can be followed over time.

Employment terms differ among SIPP, CPS, and CES. In SIPP, "with a job" includes those who were temporarily absent from a job because of layoff and those waiting to begin a new job in 30 days; whereas in CPS, those persons would be considered "unemployed". Also, CPS statistics cover both farm and nonfarm households, but the reported SIPP data are nonfarm only. CPS data are from the week that contains the 12th of the month, but SIPP data are from questions referring to individual weeks during the prior 4 months. The CES reports for each consumer unit member the number of weeks worked and the number of hours per week.

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<sup>2</sup>Northeast includes Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. Midwest (called North Central in the CES) is composed of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. South is Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Louisiana, Kentucky, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. West includes Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.



**Occupation.** SIPP occupation classifications are: Managerial and professional specialties; technical, sales, and administrative support; service; precision production, craft, and repair; and operators, fabricators, and laborers. These are the categories used in the 1980 Census and in the CPS household survey since 1983. They are sufficiently different from the 1970 Census classification system that incorporation of the new system into the CPS series containing occupational data was considered a break in the historical data series. Only about 35 percent of the occupational categories are directly or nearly comparable between the two systems. The diary CES uses the 1970 categories: Professional and technical; managers; clerical and sales; craftsmen and foremen, operative, laborers and service workers; and retirees. The SIPP microdata tape includes about 500 occupation codes based on the 1980 Census codes and classifications.

**Income.** CPS had been the primary source of household income data, but now the SIPP data provide comprehensive data on income. The CPS asks respondents in March to recall their income from the previous year, but people may forget some income, especially that which is not wage or salary. SIPP inquires about 50 or more types of income, transfer payments, and noncash benefits during each interview (every 4 months). Both SIPP and CPS exclude rebates, refunds, loans, capital gains, interest on IRA's, Keogh plans, and U.S. saving bonds. CPS excludes lump sum payments such as inheritance or insurance settlements that are included in SIPP.

The SIPP nonresponse rates for income questions are lower than CPS rates. Nonresponse in SIPP ranged from 3 percent for food stamp allotments to 13 percent for self-employment income. CPS nonresponses range from 9 percent for food stamp allotments to 24 percent for self-employment and income. Income reporting in CES is not as complete as SIPP and CPS. In CES, 16 percent of CU's in the interview survey and 23 percent in the diary survey are designated incomplete income reporters; that is, they did not report wages, salaries, self-employment income, or Social Security

income. Even those who were considered complete income reporters may not have given a full accounting of income from all sources.

In published reports of the CPS and SIPP, both median and average income are presented. CES publications usually report average annual income before tax. Median income is lower than mean income because even though income seldom is less than zero, there is no similar upper limit to income. CES reports consumer unit income; CPS and SIPP provide income information for households, families, and persons. Median income for households is lower than median income for families.

Aggregate income data are published by the Bureau of Economic Analysis (BEA) in the personal income series of the National Income and Product Accounts (NIPA) and repeated in the Federal Reserve Board's Flow of Fund Accounts. The BEA average income figures represent income per capita (total income divided by total population including men, women, and children).

**Expenditures.** SIPP and CPS do not contain expenditure data. Both portions of CES provide detailed data on expenditures. The interview survey of CES provides data on expenditures that respondents can be expected to recall for as long as 3 months. Included are food, housing, apparel, transportation, health care, entertainment, personal care, reading, education, miscellaneous, cash contributions, personal insurance, and pensions. The CES diary survey obtains data on food at home and away, housekeeping supplies, nonprescription drugs, personal care, fuels, and utilities.

Another major source of expenditure data is the Personal Consumption Expenditures (PCE) component of NIPA. These estimates represent the market value of goods and services purchased by the entire personal sector in the United States. Because the PCE data are collected from establishments, they cannot be analyzed by characteristics of households. Comparisons between CES data and PCE data show the CES estimates to be lower than the PCE series for most consumption categories.

### **Data Processing**

**Weighting.** Weights are calculated for each household in a sample to provide estimates



for the U.S. population. Each survey has its own procedures for selecting and weighting the sample. Weighting in the CES surveys begins with the probability of selection of the consumer unit. Other factors are: A factor to adjust for subsampling in the field; a noninterview adjustment; and a national ratio-estimate adjustment for age, sex, and race to urban, civilian, noninstitutional population controls. The SIPP weights also begin with a base weight equal to the inverse of the household's probability of selection and has similar adjustments. Factors include: A noninterview adjustment for persons who were eligible for the sample but not interviewed, adjustments so sample estimates agree with CPS estimates by type of householder, and an adjustment so that the husband and wife of a household receive the same weight. The SIPP weight estimation procedure resulted in persons' weights varying from about 500 to 50,000.

**Imputations, allocations, and edits.** When data are missing or responses are inconsistent, values may be imputed. CES diary tapes have imputed values for demographic characteristics and weeks worked when nonresponse is encountered, and imputation routines are used when there is clear evidence of invalid nonresponse, such as food expenditure without a description. CES interview tapes have data imputation routines for missing or invalid entries that affect all fields in the data base except income and assets. Missing or invalid attributes, as well as expenditures, are imputed. SIPP imputations replace missing data with a corresponding value from a housing unit or person having certain other characteristics in common with the unit or person. Both CES and SIPP files include flags for many variables to mark whether the data are reported or imputed for that household or person.

Allocations are made when responses are not specific. For example, when CES respondents report expenditures for fuel and utilities, rather than a specific type such as gasoline, the expenditures are allocated into components of the group. Editing is done to provide consistency with other information from the household. In the SIPP files, edits are not flagged but a code is provided so that the preedited or unedited value may be used.

**Cross-sectional, longitudinal.** Cross-sectional surveys provide data from one point in time, whereas longitudinal studies follow households or individuals across time. The CPS has been treated as cross-sectional data, consisting of a new set of data each month; however, it has a longitudinal dimension. The rotation pattern is for a household to be in the sample for 4 consecutive months, out for 8, and then back in for 4 more months, so that the labor market experience of individuals may be followed over a period of 16 months. Coding and processing improvements to take advantage of the longitudinal character of the CPS data base have been proposed.

CES interview data can be analyzed as cross-sectional or longitudinal data. The microdata tapes provide quarterly files so the expenditures and characteristics of consumer units can be followed over four quarters.

SIPP also provides both cross-sectional and longitudinal data. A core of demographic, income, and labor force questions are asked in each interview. These characteristics of individuals may be followed over 2-1/2 years by using a unique identification number that allows linking of information about an individual across files. SIPP longitudinal reports and public-use data files are planned but will require considerable preparation.

Longitudinal analysis requires new definitions, concepts, weighting, and imputation procedures. The definitions of household and family are more complicated in longitudinal studies because individuals enter and exit households or families. The universe is not fixed over time, so it must be defined as some particular point or a union or intersection of some set of cross-sectional universes. Weights are difficult to calculate since a slightly different set of people are interviewed each month. These and other issues are being addressed by SIPP researchers as they prepare SIPP files for longitudinal analysis.

## FORMS OF DATA

Availability of data in more mediums is increasing. Microdata are available on computer tapes or diskettes for personal

computers (pc). Summary data are in the familiar published form but also are available in microfiche, on-line, tape, or pc diskettes. The following Directory of Data Files notes a few of these options. However, the full offerings are reported in the publications listed in the Directory of Catalogs (p. 11). Most agencies publish two catalogs: One for microdata tapes and diskettes and one for printed materials. The National Technical Information Service (NTIS), the Federal Government's primary depository for research and technical information, offers catalogs of database services and products in paper, film, and machine-readable formats.

A review of these Federal agency data catalogs suggests that microfiche and diskettes often are alternatives to printed tables. Microfiche may be less expensive to purchase than books and is less expensive to mail and to store. Depending on the reduction ratio, 98 to 420 images of 8-1/2" x 11" source material can be arranged on one 4" x 6" sheet. For example, the 1970 Census in print uses five file cabinets. The 1980 Census in microfiche takes only 5 linear feet of shelf space. As a result, researchers wishing to move toward a paper-free office are ordering summary data and reports in microfiche form and are putting their own computer outputs onto microfiche instead of paper.

Some persons with personal computers are moving directly from paper to diskettes. Diskette storage offers the additional advantages of mathematical or other processing of data without reentering the values. For example, Consumer Price Index (CPI) data are available on diskettes or can be downloaded to a diskette from the on-line Cendata or from the Department of Commerce bulletin board. It then can be merged with other data on a diskette or uploaded to a mainframe for use in analysis. The Bureau of Census offers the popular County and City Data Book, the 1982 Census of Agriculture, and other data on diskette. NTIS offers food composition and other types of data on diskettes and is willing to put any of 1,000 microdata files they have onto diskette. Researchers using mainframes are holding the output, then downloading to a pc diskette, where the results can be printed, edited

into tables or graphs for manuscripts, and stored more conveniently than computer printouts.

Other data bases that are rapidly becoming available in electronic rather than printed mediums are bibliographic data bases. These search systems have implications for family economists because developments in a field depend upon efficient review of work in the area. Since family economics incorporates concepts from many fields, reports are splintered among data bases and use a wide variety of keywords. To facilitate the search by others, research writers may wish to consider the data bases in which the publication is likely to be listed, then select keywords of titles with those particular data bases in mind.

## DIRECTORY OF DATA FILES

### Annual Housing Survey: 1983 (AHS)<sup>3</sup> Census, \$140/each tape<sup>4</sup>

The AHS is a survey of housing units, conducted by Census for the Department of Housing and Urban Development. Microdata from the national survey are on 1 to 3 tapes, depending on tape density (1600 bpi or 6250 bpi). Data from a separate survey of 44 selected standard metropolitan statistical areas (SMSA's) are on 3 to 8 reels, one tape per SMSA. A national longitudinal file for 1974 through 1981 is available. The 1985 survey will be called the American Housing Survey since data will be collected every other year instead of annually. Information includes characteristics of general housing, housing and neighborhood quality, recent mover households, urban and rural housing units, energy-related housing, and financial characteristics. Publications of summary statistics are Current Housing Reports Series H-150-83, Parts A-F.

### Census of Population and Housing (1980) Economic and Agriculture Censuses (1982) Census, \$12-\$60/diskette; \$140/each tape

Census data are available in many forms including 5-1/4 inch flexible diskettes for

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<sup>3</sup> See Directory of Catalogs (p. 11) for address and telephone information.

<sup>4</sup> Tapes are 6250 bpi or 1600 bpi. Prices listed in the directory are for 6250 bpi tapes.



an IBM/PC. The diskettes, corresponding to the 1983 County and City Data, provide data from the 1980 Census of Population and Housing, 1977 Economic Censuses, 1978 Census of Agriculture, and other sources. Prices are \$60 for the first diskette and \$12 for each additional diskette. The complete package for all county, city, and place data costs \$444. Subjects on the county disks include population characteristics, vital statistics, housing units, journey to work, education, employment, and income. City disks have similar data. Summary data files from the 1982 Economic and Agriculture Censuses are available on tape at \$140 per reel. Population and housing data are available on-line to subscribers.

**Consumer Expenditure Survey, 1980-81:  
Diary and Interview (CES)  
BLS, \$105/diary tape, \$130/interview**

There are two separate consumer expenditure surveys--an interview panel survey and a diary survey. Each has its own questions and own sample of about 5,000 urban consumer units. The interview survey obtains information in five interviews conducted every 3 months, whereas the diary survey has record keeping for two consecutive 1-week periods. The interview provides data on large expenditures such as automobiles and major appliances or recurring expenses such as rent and insurance premiums, estimated to be 95 percent of a household's expenditures. The diary survey records data on food, nonprescription drugs, household supplies, and personal care items. Both surveys collect income data and demographic characteristics.

Expenditure data have been collected since 1888 for various purposes, including construction of market baskets used in the Consumer Price Index. Previous surveys have been conducted about every 10 years (including 1960-61, 1972-73) but surveys now are continual. The 1980-81 microdata tapes are available, and subsequent years will be forthcoming. Published reports include BLS Bulletin 2173 on the diary data and BLS 2225 on the interview data.

**Current Population Survey (CPS)  
Census, \$140/each tape**

The CPS is a continuous, monthly survey of 60,000 households. Data are published in BLS Employment and Earnings and Bureau of Census Current Population Reports--Population Characteristics (P-20), Income of Families and Persons (P-60), Farm Population (P-27), Estimates of U.S. Population (P-25), and Special Reports (P-23). Microdata tapes have data for the Nation, regions, census divisions, States, and 44 SMSA's. Files containing basic and supplemental data are available for each month, and there are files on special topics (for example, non-cash benefits, child support payments, and migration).

**Flow of Funds  
FRB, free if blank tape provided**

The complete set of accounts are available on tape, from 1952 for quarterly tables and 1946 for annual tables. Published summary statistics are available monthly. Flow of Fund accounts include the household sector with data for personal income, saving, investment, liabilities, and consumer durables. The household sector estimates are almost entirely residual, derived from data for other sectors (corporate business, government, and financial institutions). That is, the data are provided from reports by other parties to the transactions, not by the households.

**High School and Beyond (HS&B)  
NCES, 7 files, \$180/each tape (raw),  
\$200/each tape (SAS)**

The HS&B study is a nationally representative sample of sophomores and seniors in public and private high schools in 1980 with followups in 1982 and 1984. Its primary purpose is to obtain information on the educational and occupational plans of young people. The student file contains over 600 variables on 58,000 student respondents. The school file has over 200 variables on the 988 sample respondents. Student variables include background, education, work experience, postsecondary plans, aspirations, and cognitive test scores. School variables include enrollment, instructional programs, funding sources,

discipline problems, and grading systems. Also available are a parents file, twin and sibling file, friends file, language file, and teacher comments file.

The HS&B is similar to the National Longitudinal Study of the High School Class of 1972 (NLS) (see p. 9) in many aspects of the questionnaires and cognitive tests, which allows interstudy comparisons. The two studies differ in that the HS&B study surveys parents and teachers and it includes sophomores as well as seniors.

#### **Household Transportation Panel EIA, \$140/each tape**

This transportation panel study records gasoline purchases by month by a national sample of households for June 1979 to September 1981. It is part of a series on household vehicle fuel consumption. Data include number and type of vehicles, quantity and cost of fuel purchases, and miles driven each month.

#### **Labstat BLS, \$85-\$200/each tape**

This is a data base composed of several separate files that consists primarily of time series data. A series refers to a discrete variable for which observations are available over regular time intervals (usually monthly). The Labstat data base includes over 100,000 series, distributed among almost 20 data files including: Consumer Price Index; labor force; unemployment; employment, hours, and earnings; imports by tariff and industrial commodity classes; and indexes of employer compensation costs. For example, the CPI file has U.S. average CPI-W and CPI-U for 357 consumer items and group of items. The indexes are monthly, with some beginning in 1913. CPI indexes are available for areas, regions, and city sizes. The labor force file has macrodata on employment and unemployment since 1948. Individual records on labor force participation are available since 1976. BLS monthly publications of such data include: CPI Detailed Report, Employment and Earnings, and Monthly Labor Review.

#### **National Food Consumption Survey 1977-78 (NFCS)**

**HNIS, \$140-\$465/each tape**

The NFCS provides data on the kind, quantity, and money value of food consumed by households and individuals. Information was collected from about 15,000 households and 34,000 individuals from these households in 48 States. Five supplemental surveys were: Households in which at least one member was older than 64 years of age; households with members eligible for the Food Stamp Program; and households in Puerto Rico, Alaska, and Hawaii, respectively. Published reports are available for food or nutrient intakes of individuals and food consumption of households by region. Microdata tapes are available for household or individual by season of the year, and for low-income households and elderly households. This is the sixth food consumption survey conducted on a nationwide scale (1936, 1942, 1948, 1955, 1965-66, 1977-78). A new survey, the Continuing Survey of Food Intakes by Individuals, is being conducted. It has the basic features of the individual intake component of the NFCS and will complement it, but the new survey will be conducted annually so it will provide continuous, up-to-date information of food consumption practices and dietary adequacy of the population. The 1985 survey has a nationally representative sample of women who are 19 through 50 years of age, of all children of those women who are 1 through 5 years of age, and a sample of low-income women and their preschool children. New samples will be selected each year. Data are from six 24-hour recalls of food intake for each respondent over a 1-year period. Data include kind and quantity of food, source (home, school, and so forth), eating occasion, and general questions about diet and health. Nutrient data will be available for 14 nutrients and dietary constituents.

#### **National Health and Nutrition Examination Survey (HANES)**

**NCHS, \$125-\$305/each tape**

HANES is a continuing national study based on physical examinations (including laboratory procedures), medical history, and standardized tests from a sample of 30,000 people ages 1 to 74. These are conducted in



2- to 4-year cycles in mobile examination centers. The survey began in 1959 and expanded in 1970 when nutrition questions were added. Data include prevalence of chronic diseases; blood pressure, cholesterol, and visual acuity; and nutritional status and deficiencies. Findings are published in Series 11 of the Vital and Health Statistics series.

**National Health Interview Survey (HIS)  
NCHS, \$425/each annual tape**

HIS is a continuing national household interview survey of the civilian noninstitutionalized U.S. population. The survey has been conducted since 1957, and tapes are available for each year since 1977. Interviews are conducted in about 42,000 households. Data include incidence of illness and injury, disability, physician and dental visits, hospitalizations, and demographic and socioeconomic characteristics. Reports are published in Series 10 of Vital and Health Statistics.

**National Income and Product Accounts  
(NIPA)**

**Personal Consumption Expenditures,  
1959-present (PCE)  
BEA, \$150/each tape**

Component series of the NIPA include the Gross National Product (personal consumption expenditures, investments, inventories, exports, and government purchases), national income, and personal income. The NIPA tape, updated monthly, has the latest estimates for the series published monthly in the Survey of Current Business. The PCE tape has monthly estimates of personal consumption expenditures by type of expenditure. Estimates are in current and 1972 dollars. These data are obtained from a census of manufacturers and a variety of other sources, not including households or individuals.

**National Longitudinal Study of the High  
School Class of 1972 (NLS)  
NCES, \$180 (raw), \$200 (SAS)**

NLS studied the education and vocational activities of young adults. A nationally representative sample of over 23,000 high

school seniors were interviewed in 1972, and four followup surveys ensued in 1973, 1974, 1976, and 1979-80. The High School and Beyond study, begun in 1980, had similar objectives. The NLS provides detail on education, employment, family-related outcomes, and other aspects such as military service, political participation, and life goals. Published reports are available from NCES.

**National Medical Care Utilization and  
Expenditure Survey (NMCUES)  
NCHS, \$425/tape.**

NMCUES provides estimates of the utilization of and expenditures for medical care, health insurance coverage, and amounts paid by insurers for health care. About 6,000 persons were included in the national household sample and about 4,000 persons were in a four-state medicaid sample (California, Michigan, Texas, and New York). The same questionnaire was used for the two samples. Information for all family members was collected from a single household respondent through five interviews about 3 months apart. Medicare and medicaid records were obtained for persons in interviewed households reported to be covered. Data in the national household sample complement data collected in the National Health Interview Survey and can be compared to the 1977 National Medical Care Expenditure Survey. Data on the cost, source and amount of payment, and public and private insurance coverage are available, as are person and family characteristics. Information includes expenditures on dental care, emergency room visits, outpatient and inpatient hospital stays, and prescription and nonprescription medicine. Published reports are a series of methodological reports, descriptive reports, and preliminary data.

**National Survey of Family Growth: 1982-83  
NCHS, \$125/each tape**

This survey is third in a series on topics related to childbearing and related aspects of maternal and child health. A nationwide probability sample of 8,000 women 15 to 44 years of age were interviewed. Variables include socioeconomic characteristics of each woman, her husband (if married), and parents; family planning practices; and

marital history. Reports based on this data and the 1973 and 1976 surveys are in Series 23 of Vital and Health Statistics.

#### New Beneficiary Survey: 1982 SSA

This is a national sample of people who began receiving Social Security benefits between mid-1980 and mid-1981. Interviews of 18,600 persons provide data on employment history, health, marital history, and income from earnings, pensions, and other sources. Microdata tapes are available and reports are published in the Social Security Bulletin.

#### Residential Energy Consumption Survey EIA, \$140/each tape

The 1981-82 survey file (the fifth in a series) has 6,000 sample households representative of the contiguous United States. Variables include housing unit characteristics, annualized fuel consumption and expenditures, weather variables, and marginal electricity rates. The tape has the survey data, an SPSS file program, and a Table Producing Language (TPL) file program. A published report is available.

#### Retirement History Study SSA

This longitudinal study, conducted in odd-numbered years from 1969 to 1979, interviewed 11,000 people who were 58 to 63 years old. Data include health, living arrangements, financial resources and assets, expenditures, leisure activities, retirement plans, travel, life satisfaction, work history of self and spouse, and family composition. The responses to the series of surveys have been merged onto one file. The Social Security Bulletin includes published reports.

#### Survey of Income and Program Participation (SIPP) Census, \$140/each tape

The SIPP is a new continuing survey designed to collect data on income, labor force experience, and participation in major government programs. In addition to these

core quarterly questions, there are annual data on assets and liabilities, and one-time data on marital history, migration, education, disability, and work history. SIPP data will be used to measure income distribution and poverty, estimate future costs and coverage of Federal and State aid programs, and predict effects of proposed changes in program eligibility rules or benefit levels.

Each of the 20,000 households in the sample is interviewed at 4-month intervals over a period of 2-1/2 years that began in October 1983. Each 4-month cycle is a wave. New panels of 20,000 will be introduced each year; thus, SIPP's sample size will grow as panels overlap. Data are available in three forms: Quarterly statistical reports (Current Population Reports P-70 series), microfiche of these reports, and microdata tapes containing person, family, and household records for one wave. The tapes have cross-sectional, quarterly files but may be matched across waves to create longitudinal files. A rectangular file for Wave 1 is available on two reels at 6250 bpi.

The research and development phase of SIPP was the Income Survey Development Program (ISDP). It was a nationally representative sample of 8,200 households, interviewed six times beginning in 1979, which provided information on income and wealth. Those data tapes are available from National Technical Information Service. A data management system, custom reports, or tape extracts are available from private firms.

#### Survey of Consumer Finances NTIS, \$140/tape

The Federal Reserve Board, U.S. Department of Health and Human Services, and five other agencies conducted the 1983 Survey of Consumer Finances. That survey, consisting of a sample of 3,824 families, provides information on the distribution of assets and liabilities among families with various characteristics, use of financial services, reaction to consumer credit regulations, and consumer pension rights and benefits. A series of reports are published in the Federal Reserve Bulletin, and a microdata tape is available.

## DIRECTORY OF CATALOGS<sup>5</sup>

Bureau of the Census  
U.S. Department of Commerce  
Customer Services  
Data User Services Division  
Washington, DC 20233  
301-763-4100

- Census Catalog and Guide: 1985  
Description of publications, computer tapes, and microfiche.  
\$13, GPO, Stock No. 003-024-06331-0
- Data User News  
Monthly newsletter on new products, plans, and services. \$21/yr, GPO
- Directory of Data Files  
Abstracts of data files (summary statistics, microdata) and software issued through 1983. \$11, Census Customer Services
- Factfinder for the Nation No. 5, Reference Sources  
List of guides, directories, catalogs, and indexes to Census Bureau statistics.
- Monthly Product Announcement  
Monthly list of new Census products.

Bureau of Economic Analysis (BEA)  
U.S. Department of Commerce  
1401 K Street NW.  
Washington, DC 20230  
202-523-0777

- BEA Catalog of Publications and Computer Tapes  
List of periodicals, working papers and computer tapes (for example, National Income and Product Accounts (NIPA)).

Bureau of Labor Statistics (BLS)  
U.S. Department of Labor  
Office of Publications  
Washington, DC 20212  
202-523-1221

- BLS Machine-Readable Data and Tabulating Routines (Report 620)  
Abstracts of statistical series and surveys (for example, CPI, CES) available in machine-readable form.
- Current BLS Publications  
Description of selected publications.

- Data Files on Tapes  
Brief listing of major data series.
- How to get Information from the Bureau of Labor Statistics  
Summary of BLS information and where to find it (publications, electronic news service, mailgram, magnetic tapes, and telephone summary).

Energy Information Administration (EIA)  
U.S. Department of Energy  
Forrestal Building, Room 1F-048  
1000 Independence Avenue SW.  
Washington, DC. 20585  
202-252-8800

- EIA Publications Directory 1984: A Users Guide  
List of publications, microfiche, and data files.
- Statistical Data Files from the Energy Information Administration  
Description of data files (for example, Residential Energy Consumption and Expenditures)

Economic Research Service (ERS)  
U.S. Department of Agriculture  
1301 New York Avenue NW., Room 208  
Washington, DC 20005-4788  
202-786-1515

- ERS Reports  
Abstracts of periodicals and reports.

Federal Reserve Board (FRB)  
Publications Services  
Washington, DC 20551  
202-452-3244

- Public Information Materials  
Abstracts of publications on FRB statistics (for example, Flow of Funds).

Food and Nutrition Service (FNS)  
U.S. Department of Agriculture  
3101 Park Center Drive  
Alexandria, VA 22302  
703-756-3284

- Publications of the Food and Nutrition Service  
List of publications on food assistance programs.

<sup>5</sup>Free unless a price is stated.



**Human Nutrition Information Service  
(HNIS)**

**U.S. Department of Agriculture**  
Federal Building, Room 368  
Hyattsville, MD 20782  
301-436-8617

- Machine Readable Data Sets on Composition of Foods and Results From Food Consumption Surveys  
Description of tapes (food composition and consumption) and diskettes (nutrient values).
- Publications List  
List of publications (for example, National Food Consumption Survey 1977-78 (NFCS) reports).

**National Center for Education Statistics  
(NCES)**

**U.S. Department of Education**  
Statistical Information Office  
1200 19th Street NW., Room 418  
Washington, DC 20208-1402  
202-254-6057

- Selected Publications From NCES  
Description of reports, bulletins on education statistics.

**National Center for Health Statistics  
(NCHS)**

**U.S. Department of Health and Human Services**  
Scientific and Technical Information Branch  
Division of Data Services  
3700 East-West Highway, Room 157  
Hyattsville, MD 20782  
301-436-8500

- Catalog of Public Use Data Tapes From the National Center for Health Statistics  
Description of over 100 data tapes (for example, National Medical Care and Utilization Survey).
- Catalog of Publications of the National Center for Health Statistics 1979-83  
List of publications, reports, and an index to selected health topics.

**National Technical Information Service  
(NTIS)**

**U.S. Department of Commerce**  
5285 Port Royal Road  
Springfield, VA 22161  
703-487-4600

- Data Base Services and Federal Technology in Machine-Readable Formats, PR-595  
Explanation of NTIS machine-readable information products and services.
- General Catalog of Information Services No. 9, PR-154  
Overview of NTIS services and products (research and technical information available in paper, film, and machine-readable formats).
- NTIS Data Files, PR-700  
List of computerized data files (for example, Household Pension Survey).

**Social Security Administration (SSA)**  
**U.S. Department of Health and Human Services**

Office of Research, Statistics and International Policy  
1875 Connecticut Avenue NW.  
Washington, DC 20009  
202-673-5579

- ORSIP Publications Catalog--1986  
List of publications of statistical compilations and research studies; microdata files (for example, Retirement History Study).

**Statistics of Income Division (SOI) D:R:S**  
**Internal Revenue Service**

**U.S. Department of the Treasury**  
1111 Constitution Avenue NW.  
Washington, DC 20224  
202-376-0102

- SOI Publications and Other Information Available  
List of publications (on statistics of income, individual tax returns) and public-use tape files (on estate tax returns, migrations, and individual income tax returns by State and county).

**Superintendent of Documents**  
**U.S. Government Printing Office**  
Washington, DC 20402  
202-783-3238



# Terms, Concepts, and Acronyms in Family Financial Planning

By Joyce M. Pitts  
Home economist

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Recent laws and technologies have produced additions to our financial language. New terms (and new uses for old terms) have originated from such events as deregulation of financial institutions and development of creative mortgages. This paper explains some of these terms in brief, nontechnical definitions. It is divided into three subject areas: (1) Economic issues, (2) financial institutions and instruments, and (3) mortgages and consumer credit.

## ECONOMIC ISSUES

We are facing an era of growing economic and financial complexity. Consumers need to know how to interpret the signals that economic indicators give, how economic trends and policies can affect financial goals, and how to make financial decisions based on economic conditions. Understanding the following terms and concepts will aid consumers in interpreting economic issues.

### Indicators

**Index of Leading Economic Indicators.** Economic indicators generally are divided into three groups, depending on whether their turning points lead, lag, or coincide with the turning points in the business cycle.<sup>1</sup> Leading indicators generally have turning points that precede peaks and troughs in general business activities. The Index of Leading Economic Indicators is one of three composite indexes computed monthly by the U.S. Department of Commerce, Bureau of Economic Analysis (BEA). It is a summary

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<sup>1</sup>The economy historically has exhibited alternating and recurring phases of expansion and contraction, also called peaks and troughs. During the expansion phase there is a rise in business activity; during the contraction phase there is a decline. In between the two is the turning point. This whole process is known as the business cycle.

of several time-series measurements including: The average workweek of production employees, the index of stock prices, the index of new building permits, the percent change in sensitive prices, and the money supply (table 1). BEA uses data from many sources to construct composite indicators. For example, they receive data on the average workweek from the U.S. Department of Labor, stock prices from Standard and Poor's Corporation, and the money supply from the Board of Governors of the Federal Reserve System (Federal Reserve). Initial releases of the Index of Leading Economic Indicators reflect a summary of 10 time series with updates that include all 12 of the series. This composite often is used as an aid in the interpretation and prediction of business activities. It generally is thought that 3 consecutive months of decreases in the index signals a recession. However, such trends sometimes have only reflected a temporary slowdown in the rate of expansion.

**Index of Coincident Economic Indicators.** Coincident indicators, also called roughly coincident indicators, have peaks and troughs that roughly parallel those in general business activities. Examples include: Personal income, industrial production, nonagricultural employment, and manufacturing and trade sales. The composite Index of Coincident Economic Indicators often is used as an indication of current economic conditions (table 1).

**Index of Lagging Economic Indicators.** Lagging indicators generally have peaks and troughs that follow turning points in general business activities. Examples include: Business loans outstanding, prime rates, and the length of unemployment. The composite index of lagging economic indicators is a summary measure that includes six of these indicators (table 1). This index usually moves in the opposite direction from the index of leading economic indicators.

**Level of employment.** The U.S. Department of Labor, Bureau of Labor Statistics (BLS), has two methods of measuring employment. The Current Population Survey (CPS) gathers

household data, whereas the Current Employment Statistics Survey (CESS) gathers payroll data through State agencies. The CPS, referred to as the household survey, provides information on the number in the labor force, total employment, and unemployment rates. The CESS, referred to as the establishment survey, gives information on employment, hours, and earnings of workers on nonagricultural payrolls (table 2).

**Unemployment rate.** Unemployment rates are released monthly by BLS and reflect the percentage of unemployed persons in the the labor force, based on the CPS. Persons are considered unemployed if they had no employment during the survey week, were laid off, or had made no attempt to find employment during the 4 weeks prior to the survey (table 2).

**Consumer Price Index (CPI).** The CPI, also released monthly by BLS, is a measure of the

average change in prices of a fixed market basket of goods and services and often is used as a measure of inflation. Prices are included for food, clothing, shelter, fuels, transportation costs, doctors' and dentists' charges, drugs, and other goods and services required for day-to-day living. The CPI-U is determined by expenditure patterns of urban households and the CPI-W looks at those for urban wage-earner and clerical-worker households. The CPI often is used to make cost-of-living adjustments (COLA) to wages and retirement benefits.<sup>2</sup>

<sup>2</sup>For additional information on the CPI, see "Two measures of inflation: The Consumer Price Index and the Personal Consumption Expenditure Implicit Price Deflator," by Frankie N. Schwenk, Family Economics Review, Winter 1981, pp. 13-18. Also see "Revision of the Consumer Price Index in 1987" on p. 22 of this issue.

Table 1. *Components of the composite indexes of economic indicators*

Index of Leading Economic Indicators	Index of Coincident Economic Indicators	Index of Lagging Economic Indicators
Average workweek, production workers, manufacturing.	Employees on non-agricultural payroll.	Index of labor costs per unit output, manufacturing.
Average weekly initial claims for State unemployment insurance.	Index of industrial production.	Ratio, manufacturing and trade inventories to sales in 1972 dollars.
Manufacturers' new orders, consumer goods and materials in 1972 dollars.	Personal income less transfer payments in 1972 dollars.	Average duration of unemployment in weeks.
Index of net business formation.	Manufacturing and trade sales in 1972 dollars.	Ratio, consumer installment credit outstanding to personal income.
Index of stock prices, 500 common stocks.		Commercial and industrial loans outstanding in 1972 dollars.
Contracts and orders for plant and equipment in 1972 dollars.		Average prime rate charged by banks.
Index of new housing authorized by local building permits.		
Vender performance, percent of companies reporting slower deliveries.		
Net change in manufacturing and trade inventories on hand and on order in 1972 dollars.		
Percent change in sensitive materials prices.		
Money supply, M2 in 1972 dollars.		
Change in business and consumer credit outstanding.		

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

**Producer Price Index (PPI).** The PPI is a measure of price levels and price changes for goods at various stages of production--crude, intermediate, and finished. Included are all commodities produced in the manufacturing, agricultural, forestry, fishing, mining, and public utilities sectors. Commodities such as farm products, textiles, chemicals, lumber, machinery, food, automobiles, jewelry, furniture, and other goods are included. Movement in the PPI may be reflected later in consumer prices.

### Policies<sup>3</sup>

**Fiscal policy.** Fiscal policies are various activities used by the Administration and Congress to alter Government revenue and expenditures, thus influencing total spending in the economy. Total spending can be

<sup>3</sup>Certain policy actions implemented by the Government sometimes are referred to as stabilization policies. The purpose of stabilization is to reduce disturbances such as inflation and unemployment in economic activity. Fiscal and monetary policies are stabilization techniques. For additional information on Government policies, see Federal Tax Policy, 4th edition, by Joseph A. Pechman, 1983, The Brookings Institution, Washington, DC.

**Table 2. Major indicators of employment and unemployment, seasonally adjusted<sup>1</sup>**

Category	Quarterly averages	
	1984 4th quarter	1985 1st quarter
Household data (thousands of persons): <sup>2</sup>		
Labor force .....	115,885	116,858
Total employment .....	107,652	108,432
Not in labor force .....	62,948	62,364
Discouraged workers .....	1,303	1,253
Unemployment rates (percent of the labor force)--all workers .....	7.1	7.2
Establishment data (thousands of jobs):		
Nonfarm payroll employment .....	95,849	96,640
Average weekly hours (hours of work)-- total private nonfarm .....	35.2	35.1

<sup>1</sup>Seasonal adjustment is a statistical method used to remove the affects of changes in the calendar from time series. When looking at general trends, seasonally adjusted numbers usually are used because they eliminate the effects of weather patterns, regular production and marketing cycles, seasonal discounts, and holidays from the data, thus more clearly revealing underlying trends.

<sup>2</sup>Includes the resident Armed Forces.

Source: U.S. Department of Labor, Bureau of Labor Statistics, 1985, The employment situation: May 1985, News, USDL No. 85-235.



adjusted directly by increasing or decreasing Government spending and indirectly by increasing or decreasing taxes. For example, taxes sometimes are cut so that more money in the marketplace will rejuvenate sluggish business activities.

**Tax base broadening.** A tax base is an object that is subject to taxation, such as income, property, or inheritance. Tax base broadening is a fiscal policy technique that finds new sources to tax or increases the proportion of taxation on certain objects. Methods of broadening the tax base include eliminating specific deductions or allowing fewer exemptions.

**Monetary policy.** Monetary policies are activities used by the Administration and the Federal Reserve to adjust the availability and cost of money and credit. By controlling the amount of money in circulation, the Government can indirectly increase or decrease the level of economic activity. Techniques of monetary control include: Open-market operations (purchases and sale of Government securities in the open market), discount policy (extending credit directly to depository institutions), and reserve requirements (the amount institutions must hold against customer deposits).

**Money supply.** Money supply, or money stock, represents a summary measure of the amount of money held by the public and is used as a monetary policy guide. M1 is the sum of all currency and coin outside Treasury, Reserve, and commercial banks, plus travelers checks, demand deposits, and other checkable deposits, such as NOW (negotiable order of withdrawal) and ATS (automatic transfer service) accounts and credit union share drafts. M2 equals M1, plus savings accounts, small-denomination time deposits, money market mutual fund shares, overnight Eurodollars (U.S. dollars at banks outside of the United States), and repurchase agreements. M3 equals M2, plus large-denomination time deposits and other investments. If the money stock increases too rapidly, the Federal Reserve can use one of its monetary policy techniques (such as increasing reserves to slow growth) in an effort to control inflation.

**Industrial policy.** Industrial policy involves certain activities aimed at adjusting industrial output. A government might encourage new high-technology industries, assist old industries to regain strength, or attempt to prevent a decline in selected industries. The United States does not have a formal industrial policy. However, certain fiscal and trade policies--such as subsidies for exports, import quotas, and embargos--do have a direct affect on industrial output.

**International trade policy.** International trade policy involves activities by the Government to control exports and imports. Trade policies attempt to balance the advantages of free trade (such as increased competition, resulting in lower prices) with those of trade restrictions (such as increased demand for American-made products). There has been growing debate lately on adoption of a "protectionism" trade policy that would impose strict quotas on foreign shipments, thus protecting domestic companies.

**Balance of payments.** The balance of payments represents all payments between trading nations. This includes payments for foreign investments, foreign aid, and imports and exports. The balance of trade is the import/export portion of the balance of payments. Countries aim for a certain balance between what they pay out for imports and what they take in for exports. The United States has a trade deficit, importing in excess of \$100 billion more per year than exporting.

**Exchange rate.** The exchange rate represents the value of one nation's currency in relation to that of other countries. Recently the U.S. dollar has had a high exchange rate relative to the currencies of its trading partners. This has had both good and bad results. For example, the strong dollar assisted in the economic recovery by reducing import prices, thus requiring U.S. firms to keep prices low in order to compete; however, it also reduced the competitive position of U.S. companies in the international marketplace, contributing to the Nation's trade deficit.



## FINANCIAL INSTITUTIONS AND INSTRUMENTS

The Electronic Funds Transfer (EFT) Act and the Depository Institutions Deregulation and Monetary Control Act of 1980 (MCA) make important changes in the banking system and include some new financial terms, concepts, and acronyms. The EFT Act<sup>4</sup> regulates computer banking. It authorizes the use of automated teller machines (ATM), point-of-sale (POS) terminals, preauthorized payments, and telephone transfer service (TTS); and sets limits to customers' liability for unauthorized use of debit cards.<sup>5</sup> Title II of MCA called for a phasing out of interest rate ceilings to promote greater competition, less regulation, and greater efficiency in banking and related financial services. It also reduced regulatory barriers that prevented competition among various types of financial institutions, by expanding the lending options of thrift institutions and by permitting wider use of interest-earning checking accounts.

### Financial Institutions

**Banks.** Commercial banks engage in a variety of financial activities and services involving receiving, transferring, lending, and investing money. They accept deposits from individuals and businesses for saving, checking, and investment accounts; are owned by stockholders; and operate for a profit.

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<sup>4</sup>For additional information of EFT, see "EFTS--Electronic funds transfer systems," by Cynthia L. Jennings, Family Economics Review, Winter 1980, pp. 9-13; "Electronic funds transfer," Family Economics Review, 1984(1):6; and "Costs and benefits of the Electronic Fund Transfer Act," Family Economics Review 1985(4):22.

<sup>5</sup>A debit card resembles a credit card and is sometimes referred to as an access card. It is electronically read and immediately deducts the amount of a purchase or withdrawal from the customer's account. This process eliminates much of the paperwork associated with the traditional check-writing process and also allows various other banking functions (such as deposits and balance verifications) to be performed by computer.

**Thrift institutions.** Thrift institutions, sometimes referred to as noncommercial banks, include savings and loan associations and mutual savings banks. In the past, thrifts primarily handled savings from individuals and invested in mortgages. Historically, they have been sensitive to changes in interest rates, and suffered widespread losses when rates reached high levels. However, steps have been taken recently to allow these institutions to attract more business through new instruments and deregulation.<sup>6</sup>

**Financial supermarket.** Financial supermarkets allow one-stop shopping for financial services. Certain banks, brokerage houses, insurance companies, and stores will manage a customer's total finances. Services typically offered include: Free checking, low-interest-rate loans, credit and debit cards, discounts on security transactions, income tax preparation, real estate assistance, and a single statement detailing all monthly activities.<sup>7</sup>

### Financial Instruments<sup>8</sup>

**Bonds.** A bond is a fixed-income security that represents a loan to the bond issuer. The bondholder usually receives semi-annual

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<sup>6</sup>Credit unions also are a segment of the thrift industry.

<sup>7</sup>For additional information on financial supermarkets, see "A buyers guide to the financial supermarkets," by William G. Flanagan and Janet Bamford, Fordes, August 1, 1983, pp. 144-149; "Best buys in the financial supermarket," by Martin Baron, 50 Plus, June 1983, pp. 42-45; and "Checking out the financial supermarkets," Money 12(5):141-147.

<sup>8</sup>Before selecting any particular investment instrument, individuals may want to get a copy of the prospectus for that investment. A prospectus is an official document required by law to be distributed by a company planning to issue securities to the general public. It provides information on the company's investment objectives, the amount of sales charges, procedures for redeeming shares, and risks involved in investing in that particular company.

interest at a predetermined yield and repayment of principal on a given date. Corporate bonds are issued by private companies and may be backed by collateral. Municipal bonds are backed by specific revenues and are exempt from Federal income taxes and from State taxes in the State in which they were issued.

**Certificate of Deposit (CD).** A CD is a time deposit that cannot be withdrawn without penalty before a specified maturity date. On January 1, 1985, the minimum deposit for 7- to 31-day accounts was reduced from \$2,500 to \$1,000. There is no minimum deposit required by law in accounts with maturities more than 31 days. However, individual financial institutions may have their own minimum deposit requirements.

**Limited partnership.** A limited partnership is group ownership of a variety of properties. Income is earned through dividends and appreciation. Tax-benefits from interest, property taxes, and capital losses are passed on to investors. Money, however, is usually tied up until the properties are sold and the partnership is liquidated.

**Money Market Deposit Account (MMDA).** MMDA's were authorized to enable banks and thrift institutions to compete with money market mutual funds. These interest-bearing instruments are insured and offer limited transaction privileges, such as check writing.

**Mutual fund.** Mutual funds are pooled investments that are professionally managed. A money market fund (MMF) is a mutual fund that typically invests in short-term securities, such as Treasury bills, and large denomination certificates of deposits. Mutual funds are not insured.

**Real estate investment trusts (REITS).** REITS are professionally managed investment accounts similar to mutual funds. Dividends are from rental incomes received from various real estate properties. These trusts are bought, sold, and traded daily on the open market.

**Receivables-backed securities.** There is a growing trend on Wall Street to offer securities that are backed by a range of consumer and commercial loans. Certificates of automobile receivables (CAR), for example, offer ownership in a pool of car

loans. Cash flow from the loans is collected by the investment firm and goes to investors. Theoretically, loans could be backed by any collateralized loan.<sup>9</sup>

**Stock.** Stock is ownership interest in a corporation, entitling the stockholder to a part of the corporation's earnings (dividends). The value of common stock increases or decreases primarily according to the performance level of the company. Preferred stock pays fixed dividends that often are higher than for common stock in the same company. However, preferred stock does not usually increase in value.

**Treasury securities.** The U.S. Treasury issues bills, bonds, and notes. Each is sold at a discounted face amount, cashed in for full face value at maturity, and traded on the open market. Bills, whose minimum denomination is \$10,000, mature in a year or less. Bonds are available in denominations of \$1,000 with maturities from 10 to 30 years. Notes can be purchased in denominations of \$1,000 with maturities from 1 to 10 years. Treasury bill interest rates are a basic indicator of the price the U.S. Government must pay to obtain money. Costs of other instruments tend to be scaled upward from this rate. Lenders often use Treasury bill rates to decide when to raise or lower interest rates on adjustable-rate loans.

**Unit investment trusts.** Unit investment trusts are professionally managed investments in a variety of instruments, such as tax-exempt or corporate bonds and stock. They offer a fixed-interest income and can be redeemed through the trust or sold through a broker. Trusts disband and pay off investors after the majority of the investments have been redeemed. This could be in 6 months if investments were in certificates of deposit, or in 20 to 30 years if investments were in corporate or municipal bonds.

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<sup>9</sup> For additional information on CAR's, see "Security backed by car loans is part of trend that may lead to lower consumer loan rates," by Ann Monroe, *The Wall Street Journal*, February 11, 1985, p. 4.

**Universal life insurance.** Universal life is an insurance/investment policy that has several built-in flexibilities. The policy holder can pay the premium at almost any time in virtually any amount and, also, can change the death benefit. The cash value of the policy increases to reflect interest earned on short-term investments purchased with part of the premium.

**Variable-annuity insurance.** Variable annuities use premiums to purchase a portfolio of securities. At retirement the assets are converted into annuity payments that vary with the yield on the portfolio.

**Zero-coupon bonds.** Zero-coupon bonds are corporate or government issued, sold at deep discounts from face value, and pay no interest until maturity. These bonds are taxed, however, as if interest had been received, unless they are protected in a tax-sheltered retirement plan.

## MORTGAGES AND CONSUMER CREDIT

During the years of high rates of inflation, many financial institutions were put in an unfortunate position--paying out high and varying amounts on customer's market-rate-based savings accounts while taking in fixed amounts from old, low-interest-rate loans and mortgages. To correct the situation, banks and thrifts began offering loans and mortgages that also were tied to market conditions. These variable-rate loans enabled the institutions to pass some of the risk against high inflation on to consumers. Inflation has eased, and interest rates on loans and savings accounts are lower and more stable. However, the past era has left new credit options. The following terms and concepts are related to mortgages and consumer credit.

### Mortgages

**Alternative mortgage instruments (AMI).** AMI's are various mortgage plans that modify the basic characteristics of the standard, fixed-rate, level-payment mortgage. They require the borrower to share some of the risk of increasing interest rates.<sup>10</sup>

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<sup>10</sup> For additional information see "Alternative mortgage instruments," by Carolyn Summers Edwards, Family Economics Review 1982(4):1-18.

**Bridge loan.** A bridge loan is a temporary, short-term loan, typically for about 6 months, that allows a purchaser to go to closing on a new home before the old one is sold. The bridge loan is made against the equity in the purchaser's old house and includes a balloon payment of principal and interest that comes due at the end of the term or at settlement on the sale of the old house, whichever comes first.<sup>11</sup>

**Creative financing.** Creative financing is a method of purchasing property, usually including an assumable, low-rate existing mortgage and some financial assistance from the seller on a short-term or long-term basis (such as acting as lender). Each transaction is adjusted to meet the specific needs of the particular seller and purchaser.<sup>12</sup>

**Secondary mortgage markets.** Federal Home Loan Mortgage Corporation (Freddie Mac), Federal National Mortgage Association (Fannie Mae), and Government National Mortgage Association (Ginnie Mae) are secondary mortgage markets. They buy residential mortgages from lenders, who continue to handle the individual payments from borrowers. This process enables the lenders to make more loans and allows Freddie Mac, Fannie Mae, and Ginnie Mae to sell debt- and mortgage-backed securities to investors. Freddie Mac and Fannie Mae pool conventional mortgages, whereas Ginnie Mae pools FHA-insured and VA-guaranteed mortgages. Ginnie Mae's are sold in units of \$25,000 or more, with yields about 1 percent higher than Treasury securities. Each month owners receive both interest and partial return of principal for each of these securities.

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<sup>11</sup> For additional information on bridge loans, see "At home: Bridge loans, buy now, pay later," Changing Times 39(7):17.

<sup>12</sup> For additional information, see "Creative residential finance," by Carolyn Summers Edwards and Isabelle S. Payton, Family Economics Review 1984(1):7-16.



**Zero-rate mortgage.** A zero-rate mortgage requires a large downpayment and a one-time finance charge. The loan then is repaid in fixed monthly installments. Zero-rate mortgages allow quick ownership but do not offer any long-term tax deductions.

### Consumer Credit

**Amortization.** Amortization is the gradual repayment of a loan through regular payments of principle and interest. When the repayment schedule is insufficient to fully amortize the loan, unpaid interest can be added to the principal, thus increasing the debt. This is negative amortization and sometimes is found in various types of adjustable rate plans.<sup>13</sup>

**Creditworthiness.** Creditworthiness is an individual's past credit rating and projected future ability and willingness to repay a loan, as determined by a creditor.

**Credit scoring system.** Statistical models often are used to determine if an individual with certain characteristics is a good credit risk. Numerical scores are assigned to various attributes, such as age, homeownership, occupation, and past credit history, to determine creditworthiness.

**Judgmental system.** The judgmental system is a nonstatistical method of determining creditworthiness, based mainly on the creditor's judgment of an applicant's ability and willingness to repay the loan.

**Prohibited factors.** Prohibited factors are characteristics concerning an applicant that cannot legally be used by a creditor as a basis for denying credit. They include sex, race, age, marital status, religion, color, national origin, receipt of public assistance, and the exercise of rights given under the Federal consumer credit protection laws.

<sup>13</sup> For information on adjustable rate mortgages, see "Adjustable rate mortgages--Consumer information needs," by Carolyn E. Summers, Family Economics Review 1985(4):4-9.

**Open-end credit.** Open-end credit is a loan used repeatedly up to a stated limit. Bills are issued monthly for a portion of the loan. Credit cards are examples of open-end credit.

**Closed-end credit.** Closed-end credit is a one-time loan, usually for the purchase of a costly item. The payment period, number of payments, and the payment amounts are specified.

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## ACRONYMS

This is a list of some additional acronyms that appear frequently in books, newspapers, and magazines.

APR	Annual Percentage Rate
CFP	Certified Financial Planner
DJIA	Dow Jones Industrial Average
ERISA	Employee Retirement Income Security Act of 1974
ERTA	Economic Recovery Tax Act of 1981
FDIC	Federal Deposit Insurance Corporation
FHLBB	Federal Home Loan Bank Board
FSLIC	Federal Savings and Loan Insurance Corporation
IAFP	International Association of Financial Planners
IMF	International Monetary Fund
NCUA	National Credit Union Administration
NYSE	New York Stock Exchange
OTC	Over-the-counter
PIN	Personal Identification Number
S&L	Saving and Loan Association
SEC	Securities and Exchange Commission
TEFRA	Tax Equity and Fiscal Responsibility Act of 1982

# Revision of the Consumer Price Index in 1987

The Bureau of Labor Statistics (BLS), U.S. Department of Labor, is updating and improving the Consumer Price Index (CPI). The resulting changes will be introduced in January 1987.

The CPI is a measure of price change for a fixed market basket of constant quantity and quality purchased for consumption. Periodic revisions are needed so that the CPI reflects price changes of items currently purchased by consumers. Consumers change their purchasing patterns as a result of changes in a number of factors, including relative prices, real income, products, tastes, and demographic characteristics. The 1987 revision will use the Consumer Expenditure Survey data from 1982 to 1984 to update the CPI market basket. The previous revision, in 1978, was based on the 1972-73 Consumer Expenditure Survey.

A new sample of geographic areas will be selected for pricing the revised CPI based on population distributions from the 1980 Census. The number of areas sampled will increase from 85 to 91. Fifty-two of the areas presently included will be retained, although the definitions for some will be affected by the use of the new Consolidated Metropolitan Statistical Area definitions.<sup>1</sup> The new sample will be "rolled in" over a 3-year period. Twenty new areas will be surveyed prior to 1987 in order for the January 1987 CPI to reflect the 1980 population distribution. Nineteen other new areas will be introduced in 1987 to 1989.

Allocating samples to produce the most accurate U.S. CPI possible with the funds available will affect the frequency of publishing CPI's for several local areas. The index for Northeast Pennsylvania (Scranton) will be discontinued. The index for Detroit (now published monthly) will be published bimonthly for even-numbered months. CPI's

for 12 areas now published bimonthly will be compiled on a semi-annual average basis.<sup>2</sup>

The classification structure of the CPI includes seven major groups of expenditures (food and beverages, housing, apparel and upkeep, transportation, medical care, entertainment, and other goods and services). The major groups are subdivided into 68 expenditure classes. A new expenditure class will be established in 1987--electronic products, covering personal computers, computer software, calculators, telephones, and other information processing equipment. That expenditure class will be part of the major expenditure group, other goods and services. Expenditure classes include 265 strata. The expenditure weights of the CPI market basket are calculated at the stratum level. Any change in the CPI from month to month is the effect of price changes of the strata comprising the market basket. CPI's for the strata (as well as for the higher levels in the classification structure) are published in the CPI Detailed Report, issued monthly. In the revision most of the strata have been restructured, a major consideration being to minimize variance in the "All Items" CPI. The number of strata will drop to 203, affecting the number of indexes published. BLS will, however, continue to publish indexes for some expenditure categories that formerly were strata where a sufficient number of price quotations are collected. A stratum usually is subdivided into one or more entry-level items. Currently there are 382 such items. Although the composition of some will be changed, the overall number likely will remain about the same.

Although the priced market basket will remain fixed at the stratum level until the next CPI revision, BLS will use data from the ongoing Consumer Expenditure Survey to update entry-level items priced to represent the strata. Reselection of entry-level items will reflect relative shifts in consumption

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<sup>1</sup> A Consolidated Metropolitan Statistical Area is an area which has more than 1 million population and is contiguous to one or more primary metropolitan statistical areas.

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<sup>2</sup> These areas are Buffalo-Niagara Falls, NY; Cincinnati-Hamilton, OH-KY-IN; Kansas City, MO-Kansas City, KS; Milwaukee, WI; Minneapolis-St. Paul, MN-WI; Atlanta, GA; Anchorage, AK; Denver-Boulder, CO; Honolulu, HI; Portland-Vancouver, OR-WA; San Diego, CA; and Seattle-Tacoma, WA.

within a stratum, or new products within a stratum, and will result in gradual changes in composition of the strata. Outlets where items are priced also will be updated on a continuing basis using the Continuing Point-of-Purchase Survey of consumers that was introduced in the 1978 revision of the CPI.

Improvements in sampling and other aspects of methodology are a major part of the 1987 CPI revision. For the first time, estimates of sampling error will be published for some indexes. An improved housing survey is being developed that will contribute to the quality of the rental equivalence measure of homeowner costs recently introduced in the CPI.

The CPI that is published for January 1987 will reflect December to January price changes in the new market basket. "Overlap indexes" will be published for 6 months following the introduction of the revised CPI.

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Source: Marcoot, John L., 1985, Revision of Consumer Price Index is now under way, Monthly Labor Review 108(4):27-38, U.S. Department of Labor, Bureau of Labor Statistics.

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## Women and Social Security — Findings From the New Beneficiary Survey

Women who were of child-bearing age during the baby boom of the fifties have begun to receive Social Security retirement benefits. The New Beneficiary Survey (NBS) of the Social Security Administration included the first wave of these women. Others will enter into retirement over the next decade.

Nearly all of the women surveyed in 1982 had married (only 1 in 10 had not), and 9 in 10 of ever-married women had raised at least one child; 4 in 10 had raised 3 or more children. Labor force participation rates over the period used to compute Social Security benefits reflect the fact that the women were raising their families at a time of high birthrates and low labor force participation rates for mothers of young children.

Although the vast majority of women had married, 36 percent were not married at the time of the survey. That figure includes 24 percent widowed, 7 percent divorced, and 5 percent never married.

The average monthly Social Security benefit was related to current marital status. Households in which married women and their husbands both were entitled to receive Social Security benefits averaged nearly twice the monthly benefit level of unmarried female beneficiaries. The average monthly benefit for unmarried women was highest for widows and lowest for divorced women. That of divorced women was approximately equal to the poverty threshold for an aged person living alone.

Other pensions are an important source of income to many Social Security retiree households. Comparison of 1970 and 1982 NBS data shows that pension receipt by new-beneficiary retired workers increased substantially over the period, with women having greater gains than men. Pension receipt by retired-worker married women doubled (from 12 percent to 24 percent) and that of widowed, divorced, and never-married women increased substantially (from 25 percent to 43 percent). Married couples in which the husband was a new Social Security beneficiary were likely to receive a private or public pension based on his previous employment. Fifty-three percent of new-beneficiary married men received such pensions. As the likelihood of a married woman becoming widowed in later years is high, the potential availability of survivor benefits from the husband's pension is important to her long-term financial security. Based on reports from new-beneficiary married men who were receiving or expecting a pension, about two-thirds of wives would receive a survivor's pension. In contrast, survivor's pensions were received by only 13 percent of new-beneficiary women who were widows at the time of the survey.

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Source: U.S. Department of Health and Human Services, Social Security Administration, 1985, The 1982 New Beneficiary Survey, No. 4 Women and Social Security. [Reprint of article from Social Security Bulletin 48(2):17-26, 1985.]



# Economic Characteristics of U.S. Households — 2d Quarter 1984

This report, issued by the Bureau of the Census, is the fourth in a series of quarterly reports based on data from the Survey of Income and Program Participation (SIPP).<sup>1</sup> The SIPP quarterly report series was developed to make data from the survey available as quickly as possible and to supplement currently available information from other statistical series that measure changing economic conditions. Highlights of findings from the second quarter of 1984 for the Nation's 84 million nonfarm households follow.

Average income for all U.S. households was \$2,261 per month in the second quarter of 1984. White households had an average monthly income of \$2,356, compared with \$1,480 for black households and \$1,735 for Spanish households.<sup>2</sup> In households with one or more members working and no members looking for work or on layoff, the monthly average income was \$2,740. In households with one or more members looking for work or on layoff, the average income was \$1,739 per month. In households having no members with labor force activity, monthly income was \$1,076.

Seventeen percent of U.S. households included a member who participated in a means-tested government program. Comparable rates for white, black, and Spanish households were 14, 44, and 36 percent, respectively. The major means-tested programs included Aid to Families with Dependent Children (AFDC), Supplemental Security Income (SSI), food stamps, medicaid, public or subsidized housing, free or reduced-price school meals, and energy assistance. Thirty-five percent of households with one or more members looking for work or on layoff received some kind of means-tested benefit, compared with 30 percent of households in which no one was in

the labor market, and 10 percent of households with one or more workers and no one looking for work or on layoff.

Ten percent of all family households had a female householder with no husband present and with one or more children under 18 years of age. These households had an average monthly income of \$1,126; if no member was in the labor force, the average monthly income was \$472. These female family households were the population group most likely to receive means-tested benefits, having a participation rate of 57 percent.

Twenty-one percent of U.S. nonfarm households had a householder who was 65 years old or over. These households had an average income of \$1,439 per month. Married couples with a householder age 65 or over had an average monthly income of \$1,998, whereas elderly households consisting of a person living alone had an average monthly income of \$866. Seventy-nine percent of elderly persons living alone were women. Twenty-one percent of all elderly households received assistance from means-tested benefit programs. Medicaid was the most frequent benefit program of the elderly, followed by public or subsidized rental housing and food stamps.

The major source of income received by all households was from earnings, which accounted for 78 percent of income received. Property income (interest, dividends, income from rental property, and other asset income) accounted for 8 percent, and Social Security and railroad retirement income accounted for 7 percent. The percentage of households receiving income from these three sources amounted to 73, 69, and 28 percent, respectively (see table). The 23.5 million households that contained a Social Security or railroad retirement beneficiary received an average monthly payment of \$562--35 percent of their total income.

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Source: U.S. Department of Commerce, Bureau of the Census, 1985, Economic characteristics of households in the United States, second quarter, 1984, Current Population Reports, Household Economic Studies, Series P-70, No. 4.

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<sup>1</sup>For information about SIPP, see "Federal sources of family economic data," by Frankie N. Schwenk, on p. 1 of this issue.

<sup>2</sup>Persons of Spanish origin may be of any race.

*Households and monthly income, by specified income source--2d quarter 1984*

Income source	Households		Monthly household income		
	Number (thousands)	Percent	Mean monthly income (dollars)	Mean amount of specified source (dollars)	Specified source as a percentage of total
All households .....	84,002	100	2,261	NA	NA
Households receiving--					
Earnings <sup>1</sup> .....	61,505	73	2,720	2,394	88.0
Property income <sup>2</sup> .....	57,722	69	2,670	255	9.6
Social Security or railroad retirement ....	23,508	28	1,590	562	35.3
Company or union pensions .....	7,238	9	1,902	394	20.7
Federal Government employee pensions ....	1,671	2	2,643	944	35.7
U.S. military pensions .....	1,283	2	3,555	1,014	28.5
State and local government employee pensions .....	2,512	3	2,211	573	25.9
Veterans' compensation or pensions .....	3,326	4	1,900	230	12.1
Private support payments <sup>3</sup> .....	4,354	5	1,994	331	16.6
Aid to families with dependent children and other cash assistance .....	3,823	5	864	316	36.6
Supplemental Security Income .....	2,963	4	1,033	245	23.7

<sup>1</sup>Earnings include wage or salary and self-employment income.

<sup>2</sup>Property income includes interest, dividends, income from rental property, and other asset income.

<sup>3</sup>Private support payments include child support, alimony, and money from relatives, friends, and charitable groups.

NA = Not applicable.

Source: U.S. Department of Commerce, Bureau of the Census, 1985, Economic characteristics of households in the United States, second quarter, 1984, Current Population Reports, Household Economic Studies, Series P-70, No. 4.

# Convenience and the Cost of the "Newer" Frozen Plate Dinners and Entrees

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Each year an array of new convenience products is introduced into the marketplace. Many of these products are multi-ingredient prepared mixtures that offer considerable savings in preparation time and a high level of built-in culinary expertise. Consumers in the United States spend about one-fifth of their home food dollars on multi-ingredient prepared mixtures (3). Frozen prepared plate dinners and entrees are examples of such products. In 1984 consumers spent over 3.3 billion dollars on frozen prepared plate dinners and entrees, representing about 2 percent of each food dollar spent in grocery stores (1).

During the past few years there has been a surge in the introduction of new and improved lines of frozen plate dinners and entrees. Unlike traditional products that include very simple fare such as fried chicken or meatloaf, the "newer" products usually feature a "gourmet"-type entree in sauce or gravy, plus a vegetable mixture and/or a seasoned starchy side dish (either potato, rice, or noodles). A wide variety of such products now are available. Some are "light" in calories and are specifically designed for use by persons watching their weight.

Many of the newer plate dinners and entrees have fancy names, are attractively packaged, and attempt to convey a luxury image. These newer products also carry premium prices. Consumers, especially those with limited resources, may want to know how much they are paying for the convenience features of such products. USDA's Consumer Use of Foods Laboratory of the Human Nutrition Information Service conducted a study in which the cost and preparation time for eight frozen dinners/entrees were compared to similar products made from home

recipes. Three dinners and five entrees were studied. Meat, poultry, fish, and shellfish products representing five nationally advertised brands were included.

## PROCEDURES AND RESULTS

### Recipe Development

All frozen convenience dinners and entrees were heated in the laboratory according to package directions given for a conventional range top or oven. Component parts of each prepared product (for example, beef, sauce, onions, mushrooms, and noodles in beef stroganoff) were separated and weighed, and proportions of separable components were computed. The mean proportions of components, each determined from two laboratory tests, along with product ingredient labels, were used as the basis of recipe development for home-prepared counterparts. Insofar as possible, the same types of recipe ingredients found in the convenience products were used in preparation of their home counterparts. For example, the same or similar cuts of meat were used, and fresh rather than frozen or canned vegetables were used if it appeared that fresh had been used in the convenience dinner or entree. Not all ingredients were duplicated. For example, ingredients such as emulsifiers, modified food starch, hydrolyzed plant protein, and artificial coloring--which typically are not used in home food preparation--were not used in the recipes.

Although recipes for the home-prepared items were not identical to product formulations of the frozen dinners and entrees, the resulting products were similar. The proportion of major separable components in the prepared home recipes closely approximated that in the heated frozen dinners or entrees. For example, the proportion of meat component was the same in both frozen and home-prepared in four of the eight products and in the remaining products it was within 1 to 2 percent. A serving of the dinners contained 2.8 to 3.0 ounces of meat, poultry, or fish; the entrees contained considerably less--1.1 to 2.5 ounces.

Recipes for home-prepared counterparts were developed to yield approximately four servings. Each recipe was prepared twice and



the mean weight then divided by the weight of the heated convenience item to determine the exact number of servings for use in cost-per-serving computations.

### Food Cost Comparisons

Each convenience product and the ingredients for their home-prepared counterparts were priced in three Washington, DC, area supermarkets for 3 consecutive weeks in the first quarter of 1985. Container sizes selected for pricing ingredients for home-prepared counterparts were typical of sizes that might be purchased by smaller households, but were not necessarily the smallest available. Factors such as recipe requirements, versatility of the product for use in other home recipes, and storage life of the product were considered. All products selected for use in cost comparisons were high-quality name brand or store brand items. Where several brands of a product were available, the one having the lowest unit price was used in costing.

When recipes specified ingredients in which trimming or cooking losses must be

considered, USDA food yield data (6, 7) were used to determine quantities of food to be costed--for example, how much fresh, ready-to-cook whole chicken was necessary to obtain 1 cup cooked, diced chicken for use in a recipe. These data allow for differences due to variety, geographic location, season, container size, variety, and so forth, and therefore represent accurate mean estimates of food yield.

Cost comparisons of each frozen dinner or entree and of the ingredients used to obtain a comparable weight of food prepared from recipes are shown in table 1. The cost per serving of frozen dinners and entrees ranged from \$1.99 to \$3.99, whereas the ingredients for a serving of their home-prepared counterparts ranged from \$0.62 to \$1.29. The frozen products were about 3 to 4 times as costly as the same quantity of food prepared from a recipe.

In each of the home-prepared dinners or entrees, the meat, poultry, fish, or shellfish component was the most expensive recipe ingredient. It ranged from 23 percent of the total cost of chicken chow mein to 77 percent of the total cost of shrimp creole.

**Table 1. Cost of "newer" frozen plate dinners and entrees and their home-prepared counterparts<sup>1</sup>**

Food	Cost per serving		Cost relative to cost of home-prepared	
	Home-prepared	Frozen	Home-prepared	Frozen
	- - - - Dollars - - - -		- - - - Percent - - - -	
Dinners: <sup>2</sup>				
Turkey breast.....	0.91	3.25	100	357
Beef tips.....	1.29	3.99	100	309
Cod.....	.84	3.29	100	392
Entrees: <sup>2</sup>				
Beef teriyaki.....	.95	2.93	100	308
Shrimp creole.....	1.29	3.99	100	309
Chicken chow mein.....	.62	1.99	100	321
Sweet and sour chicken.....	.72	2.45	100	340
Beef stroganoff.....	.89	2.49	100	280

<sup>1</sup> Prices from 3 Washington, DC, supermarkets, 1st quarter 1985.

<sup>2</sup> Each dinner included a gravy or sauce, a rice or potato side dish, and a vegetable mixture. Each entree included rice or noodles and/or a vegetable component.

## Preparation Time and Value

Next to "carry out" foods, which are "ready-to-eat," frozen plate dinners and entrees probably represent the ultimate in convenience. From the standpoint of preparation time, it is hard to compete with such products.

To assess the time-saving features of the products included in this study, "active" preparation time was estimated for each frozen and home-prepared dinner and entree. Active time included all steps that required the full or partial attention of the preparer, for example, measuring ingredients, peeling shrimp, or browning meat. Time for preparation steps such as heating a product in the oven was considered passive rather than active time since the preparer was free for other activities. Timing was started after all ingredients, equipment, and utensils were assembled at the work area in order to eliminate differences due to various kitchen arrangements. Time for cleanup was not studied.

Preparation times for each dinner and entree are shown in table 2. Active preparation time for frozen items ranged from 1 to 3 minutes and for home-prepared counterparts from 23 minutes to 1 hour, 9 minutes.

The value of time spent in preparing each frozen product and its home-prepared counterpart was estimated at three wage rates--\$7.00 per hour, \$7.87 per hour, and \$10.81 per hour.<sup>1</sup> These three wage levels were used to estimate the value of the household food preparer's time, had it been used in paid employment. They represent a clerical wage, average wage, and a managerial-professional wage for the first quarter of 1985.<sup>2</sup>

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<sup>1</sup>For information on estimating the value of time used in household production, see "New methods for studying household production," Family Economics Review 1982(3):30-33, by Colien Hefferan.

<sup>2</sup>Derived from median weekly earnings of full-time workers as published in Weekly earnings of wage and salary workers: First quarter 1985, News, U.S. Department of Labor, 1985, USDL No. 85-178; and unpublished U.S. Department of Labor data on average weekly hours worked by full-time employees in the first quarter of 1985.

The value of labor for preparing the frozen products ranged from \$0.14 to \$0.35 per serving at the clerical wage rate, from \$0.16 to \$0.39 at the average wage rate, and from \$0.22 to \$0.54 at the managerial-professional wage rate. Labor values for a serving of the home-prepared dinners and entrees were about 2-1/2 times to 16 times greater than values for their corresponding frozen counterparts.

Although the value of active preparation time is theoretical, it is of interest to add this amount to the cost of the food to arrive at estimates of "total" costs. At the clerical and average wage rates, the "total" cost of the home-prepared dinners and entrees averaged about two-thirds the cost of their corresponding frozen counterparts. At the managerial-professional wage rate, the home-prepared turkey breast and beef tips dinners cost slightly more than their respective frozen dinners, and the remaining home-prepared dinner and entrees averaged three-fourths as much as their frozen counterparts.

## NUTRITIONAL CONSIDERATIONS

Of the eight convenience products included in this study, all but one was labeled with information on nutrients furnished by the food as it comes from the container. The unlabeled item did specify, however, that nutrition information was available from the company. Three of the seven labeled products included sodium information. Information from the nutrition labels is discussed below.

Of the seven labeled products, Calories per serving ranged from 350 to 460 for the dinners and 200 to 360 for the entrees. Three of the five entrees were advertised as being "light" in Calories and, indeed, were lower (200 to 250 Calories) than the other two entrees.

The protein content of dinners ranged from 40 to 50 percent of the U.S. Recommended Daily Allowance (U.S. RDA); protein in the entrees represented 15 to 35 percent of the U.S. RDA. Percentage of the U.S. RDA for vitamin A, vitamin C, thiamin, riboflavin, niacin, calcium, and iron varied with the types of components in each dinner or entree.

Table 2. Preparation time and value of preparation time for "newer" frozen plate dinners and entrees and their home-prepared counterparts

Food	Active preparation time (minutes) <sup>1</sup>	Estimated value of time per serving <sup>2</sup>			Total cost per serving <sup>3</sup>		
		Clerical wage	Average wage	Managerial-professional wage	Clerical wage	Average wage	Managerial-professional wage
<b>Dinners</b>							
Turkey breast:							
Home-prepared .....	59	\$1.75	\$1.97	\$2.70	\$2.66	\$2.88	\$3.61
Frozen .....	1	.14	.16	.22	3.39	3.41	3.47
Beef tips:							
Home-prepared .....	69	2.24	2.52	3.46	3.53	3.81	4.75
Frozen .....	1	.14	.16	.22	4.13	4.15	4.21
Cod:							
Home-prepared .....	23	.84	.94	1.30	1.68	1.78	2.14
Frozen .....	2	.21	.24	.32	3.50	3.53	3.61
<b>Entrees</b>							
Beef teriyaki:							
Home-prepared .....	36	1.05	1.18	1.62	2.00	2.13	2.57
Frozen .....	3	.35	.39	.54	3.28	3.32	3.47
Shrimp creole:							
Home-prepared .....	35	1.26	1.42	1.95	2.55	2.71	3.24
Frozen .....	3	.35	.39	.54	4.34	4.38	4.53
Chicken chow mein:							
Home-prepared .....	34	1.05	1.18	1.62	1.67	1.80	2.24
Frozen .....	3	.35	.39	.54	2.34	2.38	2.53
Sweet and sour chicken:							
Home-prepared .....	32	.91	1.02	1.41	1.63	1.74	2.13
Frozen .....	3	.35	.39	.54	2.80	2.84	2.99
Beef stroganoff:							
Home-prepared .....	41	1.05	1.18	1.62	1.94	2.07	2.51
Frozen .....	2	.35	.39	.54	2.84	2.88	3.03

<sup>1</sup> Times for home-prepared dinners and entrees are based on recipes for approximately 4 servings.

<sup>2</sup> Wage rates were derived from median weekly earnings of full-time workers as published in Weekly Earnings of Wage and Salary Workers: 1st Quarter 1985, News, U.S. Department of Labor, 1985, USDL No. 85-178; and unpublished U.S. Department of Labor data on average weekly hours worked by full-time employees in the 1st quarter of 1985. The rates are \$7.00 per hour for clerical wage, \$7.87 per hour for average wage, and \$10.81 for managerial-professional wage.

<sup>3</sup> Cost of food plus value of active preparation time.



The Dietary Guidelines issued jointly by the Department of Agriculture and the Department of Health and Human Services (8) suggest (among other recommendations) that Americans avoid too much fat and sodium in their diet. In keeping with the guidelines' recommendations, some researchers have expressed concern about the high levels of fat and/or sodium in frozen plate dinners and entrees (2, 4, 5). Fat content of items included in this study ranged from 14 to 24 grams per serving for the dinners and 2 to 16 grams per serving for the entrees. The lighter entrees contained 2 to 5 grams of fat per serving. Many authorities suggest that daily fat intake provide no more than 30 or 35 percent of total Calories. This allows for roughly 65 to 75 grams of fat in the diets of persons consuming about 2000 Calories daily. Even the convenience dinner with the highest fat of those studied, thus supplied about one-third of the suggested day's intake of fat. The entree with the highest fat supplied a little over one-fifth of the suggested intake for the 2000-Calorie diet. Sodium content ranged from 900 to 1164 milligrams in the three products that provided sodium information on their label, representing a sizeable portion of the 1100 to 3300 milligrams of sodium estimated by the National Academy of Sciences to be a "safe and adequate" daily intake for adults. The fat and sodium content of recipes for home-prepared foods can, of course, be modified to some extent by reducing amounts of added fat and salt and by wise selection of ingredients and preparation methods.

Assessing the nutritional adequacy of plate dinners and entrees is no easy task for consumers--even with the help of nutrition labels. The following suggestions are offered as a general guide:

- In a general way, consider the nutrient content of the convenience dinner or entree compared to the foods you might typically eat. If the convenience product contains a similar amount of meat, vegetable or fruit, and rice or pasta, it probably will make a similar nutritional contribution to the day's intake.

- Use nutrition labels to make comparisons among the dinners and entrees available. Look for products that contain higher percentages of the RDA for the most nutrients. Also consider Calorie level. Choose products that contain the most nutrients for the least Calories. In keeping with Dietary Guidelines' recommendations that Americans avoid too much fat and sodium, look for products that contain fewer grams of fat (or a lower percentage of total Calories as fat) and fewer milligrams of sodium.

- If a convenience product that is low in certain nutrients or higher in fat and/or sodium is used at one meal, compensate by the types of food selections made during the rest of that day. It is the total daily diet that counts--not just one food or meal.

- No one food or meal supplies all nutrients in the amounts needed. Eating a variety of foods will help assure that all nutrients are provided. On a daily basis, foods should be included from the following major groups: Fruits; vegetables; cereals and other foods made from grains, such as breads; milk and dairy products, such as cheese and yogurt; and meat, poultry, fish, eggs, and dry beans and peas.

## CONCLUSIONS

Frozen convenience plate dinners and entrees are quick and easy to prepare. Some of the "newer" types reflect a high degree of culinary skill and may, for some consumers, represent a practical alternative to preparing foods from scratch, particularly if time, equipment, and/or skills are limited. These convenience products can, however, be costly compared to home-prepared products and may not be suitable for use by consumers on a tight food budget. The frozen products tested in this study cost about 3 to 4 times as much as similar foods made at home from a recipe. Even when value of preparation time was added to food costs, most of the frozen products were considerably more costly than their home-prepared counterparts.

In advising consumers, food and nutrition professionals may want to emphasize that the decision to use convenience products such as frozen plate dinners and entrees often becomes a tradeoff between time available

for food preparation, money available for food purchase, nutritional considerations, and, of course, eating quality. Consumers must decide for themselves which of these concerns are most important.

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# Cost of Food at Home

Cost of food at home estimated for food plans at 4 cost levels, November 1985, U.S. average<sup>1</sup>

Sex-age group	Cost for 1 week				Cost for 1 month			
	Thrifty plan	Low-cost plan	Moderate-cost plan	Liberal plan	Thrifty plan	Low-cost plan	Moderate-cost plan	Liberal plan
FAMILIES								
Family of 2: <sup>2</sup>								
20-50 years .....	\$37.00	\$46.50	\$57.40	\$70.80	\$160.10	\$201.90	\$248.60	\$307.10
51 years and over.....	34.90	44.40	54.80	65.40	151.30	192.80	237.20	283.40
Family of 4:								
Couple, 20-50 years and children--								
1-2 and 3-5 years .....	53.80	66.90	81.80	99.90	233.10	290.40	354.10	432.90
6-8 and 9-11 years .....	61.80	78.80	98.40	118.10	267.40	341.50	426.30	512.00
INDIVIDUALS <sup>3</sup>								
Child:								
1-2 years .....	9.70	11.70	13.70	16.40	42.10	50.90	59.20	71.10
3-5 years .....	10.50	12.90	15.90	19.10	45.50	56.00	68.90	82.60
6-8 years .....	12.90	17.10	21.30	24.90	55.70	73.90	92.50	107.90
9-11 years .....	15.30	19.40	24.90	28.80	66.20	84.10	107.80	124.90
Male:								
12-14 years .....	16.00	22.00	27.40	32.20	69.30	95.50	118.90	139.50
15-19 years .....	16.60	22.90	28.20	32.70	72.00	99.10	122.40	141.80
20-50 years .....	17.70	22.50	28.20	33.90	76.70	97.70	122.20	147.00
51 years and over.....	16.00	21.30	26.20	31.40	69.50	92.50	113.50	135.90
Female:								
12-19 years .....	15.90	19.10	23.10	27.90	68.90	82.60	100.00	120.70
20-50 years .....	15.90	19.80	24.00	30.50	68.80	85.80	103.80	132.20
51 years and over .....	15.70	19.10	23.60	28.10	68.00	82.80	102.10	121.70

<sup>1</sup> Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for the thrifty food plan were computed from quantities of foods published in *Family Economics Review*, 1984 No. 1. Estimates for the other plans were computed from quantities of foods published in *Family Economics Review*, 1983 No. 2. The costs of the food plans are estimated by updating prices paid by households surveyed in 1977-78 in USDA's Nationwide Food Consumption Survey. USDA updates these survey prices using information from the Bureau of Labor Statistics (CPI Detailed Report, table 3) to estimate the costs for the food plans.

<sup>2</sup> 10 percent added for family size adjustment. See footnote 3.

<sup>3</sup> The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person--add 5 percent; 5- or 6-person--subtract 5 percent; 7- or more-person--subtract 10 percent.



# Bulk Foods — Cost and Other Considerations<sup>1</sup>

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Introduced just a few years ago, large-scale merchandising of foods in bulk is spreading throughout the supermarket industry and has become an accepted part of the everyday food shopping scene in many locations. Self-service bulk food merchandising as practiced in today's supermarkets is not totally new. It is a variation of an old food marketing concept of providing customers with food products from bulk items on display--as from the old-fashioned cracker barrels found in general stores at the turn of the century. The "self-service" feature of bulk buying dates back to the sixties and seventies at which time the practice was introduced in food cooperatives and health food stores. Large-scale bulk food merchandising appears to be more than a supermarket gimmick. "Although many operators feel that the bulk foods concept is still in an embryonic stage,...most are confident that, when handled properly at the store, bulk foods seem here to stay" (5).

Some chain supermarkets now offer as many as 400 items in bulk form (10). The selection of bulk food items varies from store to store but generally includes basic baking supplies such as flour, sugar, and baking mixes; herbs and spices; dry beans, rice, and pasta; nuts and dried fruits; and numerous ready-to-eat snack foods and confectionary items. Items offered usually have relatively long shelf lives. Health and sanitation officials restrict bulk section sales of "potentially hazardous foods," that is, those that may develop organisms that cause food poisoning and spoilage (10).

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<sup>1</sup>"Bulk food" refers to unpackaged, processed or unprocessed foods in large containers from which the consumer withdraws the quantity desired.

<sup>2</sup>Technical assistance provided by Cheryl Vass.

Bulk food merchandising allows customers to select quantities not limited by commercial package sizes--as much or as little food as needed may be purchased. In a 1983 University of California, Davis, survey of more than 1,300 northern California supermarket shoppers, "ability to select exact quantities" was identified as the most important motive for purchasing bulk foods (8). While the "select only what you need" feature of bulk buying may be of particular advantage to one- and two-person households wanting to purchase small quantities of food items, some retailers claim that "a very good percentage" of the total business at their bulk food operation comes from larger suburban households (10).

In the California supermarket survey, concern about sanitation was the most prevalent reason given by shoppers for deciding not to buy bulk foods (8). Because customers may have direct contact with the food, bulk food merchandising does offer the potential for person-to-person transfer of contaminants via the food. To help prevent public health problems, the Food and Drug Administration (FDA) has developed guidelines for minimizing direct contact between bulk foods and the customer (3). These guidelines deal primarily with equipment and utensil design and operational procedures. FDA urges State or local authorities that regulate supermarkets to use the Federal guidelines as a model for developing their own standards.

Because they have no expensive packaging and promotional costs associated with them, bulk foods often are cheaper than packaged food items. Prices of bulk foods are reported to average 50 percent lower than their packaged counterparts (7). Such price comparisons often have been made with small package sizes of national brand products, however. How does the cost of bulk foods compare with store brands, generic products, and items in large packages? Are bulk foods less costly regardless of the brand and package size compared? A study conducted by the Human Nutrition Information Service of USDA attempts to answer these questions and to help shoppers evaluate the various features offered by foods in bulk.

## DATA COLLECTION

Thirty-six food items were studied. All items were very basic products representing the following categories: Baking supplies, baking mixes, cereals, rice and pasta, dry beans, nuts, dried fruit, herbs and spices, and snacks. Confectionary items were not included in this study.

Each food item was priced in both bulk and packaged forms in three Washington, DC, metropolitan area supermarkets in each of 3 consecutive weeks in spring 1985. Supermarkets included a national supermarket chain, a local supermarket chain, and a warehouse store operated by a local supermarket chain. Based on sales volume data collected from May 1984 through April 1985, these supermarkets represented the top three food retailers in the Washington metropolitan area (1). Each of the three supermarkets had a large selection of bulk foods (150 to 250 items).

The unit price of packaged food forms was recorded for all package sizes of items available in either store brand and/or national brand. Store brands represented top-line "private labels"<sup>3</sup> sold under the supermarket's name or symbol--either its own trademark or that of a cooperative or buying group (11). National brands (brand names) included well-known nationally distributed products. When more than one national brand was available, price was recorded for the brand having the lowest cost per unit. The price also was recorded for the only two items available in generic form. One of these items (rice) was a "true generic," featuring a simple, unbranded black and white package labeled with the generic name of the product. The other (dried apricots) was an "imitation generic" (a plainly packaged product merchandised like generics but carrying a private label) (2). Packaged brands of biscuit, muffin, cake, and brownie mixes were priced only if preparation instructions specified a proportion of added

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<sup>3</sup> In the case of private-label products, a retailer, wholesaler, or distributor limits the sale and distribution of its own brands to its own operation (2).

ingredients similar to the bulk mix, for example, a similar proportion of egg, milk, and so forth, to be added to the mix by the consumer in preparation of the baked product.

The assortment of brands and package sizes available varied among the food items and the supermarkets. For some foods, only one brand and size was available; for others, several brands and/or package sizes were available. When items were on "special," those prices were recorded. As regular prices were not posted for these food items, special prices were used in cost comparisons. In two of the three supermarkets, none of the items had a special sale price. In the third store, about two dozen of the total prices collected were specials on either store brands or national brands. Possible cost reduction through use of coupons was not considered in this study.

## PRICE COMPARISONS

Prices of packaged forms were compared with the corresponding bulk item prices within each supermarket in each data collection period. Cost per pound of each packaged food form was expressed as a percentage of the cost per pound of the comparable item available in bulk. A total of 272 prices for bulk foods and 774 prices for packaged food forms was used in cost comparisons. Mean percentages for each supermarket for the 3-week period were computed for each package size and brand type. Mean values were then weighted by each supermarket's share of food sales (1) to reflect the Washington, DC, area market. These weights were 0.4203 for the local supermarket chain, 0.3263 for the national supermarket chain, and 0.0448 for the warehouse store operated by a local supermarket chain (1).

### Bulk Foods

When the price of each package size and brand type of each food item was compared with the price of the corresponding bulk food within each supermarket in each week (individual data not shown), 93 percent of packaged forms were more costly than in bulk, 6 percent were less costly, and 1 percent had the same cost. On the average, the 36 bulk foods included in this study



cost 66 percent less than their packaged counterparts. Such an average, however, may not be indicative of overall consumer savings because the assortment of foods included in this study does not represent a consumer's market basket, and costs were not weighted by quantities that might typically be purchased. As is apparent from the table on pp. 36-37, savings vary greatly according to food item and according to brand type and size.

The table shows weighted means and standard deviations of the cost of food in packaged form expressed as a percentage of the cost of the corresponding bulk food product. For example, store brand all-purpose flour in a 10-pound bag (102 percent) cost 2 percent more than bulk flour; store brand corn flakes in an 18-ounce box (94 percent) cost 6 percent less than corn flakes in bulk form. Percentage costs for each brand type and package size are arranged in ascending order to make cost relationships readily apparent.

As expected, the largest savings of bulk over packaged food forms generally was for national brands and for smaller package sizes. However, special sale prices (noted in the table) affected the expected cost progression relationships in some instances. For example, national brand corn flakes on "special" in an 18-ounce box cost less than national brand corn flakes in a 24-ounce box, and specially priced national brand peanuts in a 4-ounce package cost less than peanuts in several larger sized containers.

Although larger package sizes usually cost less per pound than their smaller-sized counterparts, nonetheless, most larger package sizes still were more expensive than the bulk form. In a bulk foods cost survey conducted by the University of California, Davis, during the winters of 1982-83 and 1983-84, three-fourths of the items studied were cheaper in bulk (an average of 53 percent lower) than when purchased in 1-pound packages (9). However, the majority of the bulk items were more expensive than the same product offered in 5-pound packages (an average of 8 percent higher).

Overall, national brands cost 77 percent more and store brands, 49 percent more than bulk foods. Generic products were available in only two instances--long grain white rice in a 32-ounce package and dried apricot halves in a 6-ounce package. The generic rice (a "true generic" product) cost 10 percent less and the apricots (an "imitation generic" product) cost 12 percent more than their respective bulk counterparts.

The largest price differences between bulk and packaged food forms were for herbs and spices, particularly those in decorative glass bottles offered by national manufacturers. In fact, when herbs and spices were excluded from cost comparisons, the average savings of bulk foods compared with packaged items decreased from 66 percent to 39 percent.

Bulk food items that showed the smallest savings over packaged food forms (or that cost more than their packaged counterparts) included basic, lower cost products--flour, granulated sugar, rice, and dry beans, for example. This finding may be explained by the following factors: (1) Such products tend to be packaged in relatively large quantities; (2) package costs are low relative to product cost; and (3) these items are subject to greater price competition, resulting in considerably lower price markups than with other products (spices, for example).

### Store Brands and National Brands

Price differences between store brands (or private labels) and national brands also are of interest. National brands usually are produced by large manufacturers that promote products through advertising, coupons, and other techniques. The retail price of national brand products reflects costs associated with promotional activities, as well as costs associated with product development and marketing. Private label manufacturers, however, are able to offer their products at a lower retail price because they do not rely as heavily on costly advertising and promotional techniques and are able to save considerable development and market-testing costs by copying the formula and package design of their national brand counterparts.



Cost of packaged foods compared to bulk foods

Food item	Brand type and size of packaged food	Cost of packaged food as a percentage of bulk <sup>1</sup>		Food item	Brand type and size of packaged food	Cost of packaged food as a percentage of bulk <sup>1</sup>	
		Mean	Standard deviation			Mean	Standard deviation
Baking supplies:				Cereals--continued:			
All-purpose flour	Store 10-lb bag	102	4	Corn flakes	Store 18-oz box	94	10
	Store 5-lb bag	105	4		Store 24-oz box	<sup>2</sup> 94	8
	National 10-lb bag	111	4		National 18-oz box	<sup>2</sup> 98	6
	National 5-lb bag	114	3		Store 12-oz box	124	3
	Store 2-lb bag	167	13		National 24-oz box	133	1
	National 2-lb bag	194	13		National 12-oz box	141	7
Whole-wheat flour	Store 5-lb bag	124	0		National 7-oz box	157	0
	National 5-lb bag	161	2		National 6-oz pkg (handi-pak)	<sup>2</sup> 329	13
Cornmeal	National 2-lb bag	121	1	Rice and pasta:			
Granulated sugar	Store 5-lb bag	108	3	Long-grain white rice	Generic 32-oz pkg	90	3
	Store 10-lb bag	108	4		Store 20- to 25-lb bag	103	0
	National 10-lb bag	109	0		Store 10-lb pkg	108	0
	National 5-lb bag	112	3		Store 48-oz pkg	116	3
	Store 25-lb bag	115	0		Store 5-lb pkg	118	0
	Store 2-lb bag	167	10		Store 32-oz pkg	123	0
	National 2-lb box	182	6	Store 16-oz pkg	124	3	
Brown sugar	National 1-lb box	116	4	Elbow macaroni	Store 48-oz box	<sup>2</sup> 93	7
	Store 2-lb bag	123	1		Store 16-oz box	101	1
	Store 1-lb box	124	0		National 48-oz box	<sup>2</sup> 108	7
Nonfat dry milk	National 20-qt box	109	0		National 16-oz box	130	8
	Store 20-qt box	110	0		National 32-oz box	133	0
	Store 12-qt box	126	0		Store 8-oz box	136	2
	Store 8-qt box	129	0	National 8-oz box	180	0	
	Store 3- to 4-qt box	<sup>2</sup> 142	0	Macaroni shells	Store 16-oz box	109	0
	National 10-qt box (envelopes)	151	0		National 16-oz box	135	5
	National 5-qt box (envelopes)	152	2		Store 8-oz box	<sup>3</sup> 138	--
	National 3- to 4-qt box	208	0	Egg noodles	Store 16-oz pkg/box	112	4
Baking mixes:					National 16-oz pkg/box	<sup>2</sup> 119	5
Biscuit mix	National 60-oz box	<sup>2</sup> 123	8		Store 12-oz pkg/box	125	0
	National 40-oz box	<sup>2</sup> 128	7		Store 8-oz pkg/box	136	2
	National 20-oz box	227	0		National 12-oz pkg/box	146	2
Bran muffin mix	National 7-oz box	136	2		National 8-oz pkg/box	168	3
Corn muffin mix	National 8-oz box	123	4	Chow mein noodles	National 12-oz pkg	113	0
Yellow cake mix	Store 18.5-oz box	<sup>2</sup> 131	0		Store 6-oz pkg	126	0
Brownie mix	Store 20.5-oz box	124	0		National 5- to 6-oz can	162	16
Cereals:					National 9-oz can	177	4
Quick-rolled oats	Store 42-oz box	164	1	National 3-oz can	192	13	
	National 42-oz box	177	<1	Dry beans:			
	Store 18-oz box	185	18	Pinto beans	Store 4-lb pkg	109	0
	National 18-oz box	199	17		Store 32-oz pkg	110	3
Toasted oats	Store 15-oz box	115	6		Store 16-oz pkg	114	0
	National 15-oz box	130	9		National 16-oz pkg	145	18
	National 20-oz box	147	0	Great northern beans	Store 16-oz pkg	<sup>3</sup> 87	--
	National 10-oz box	148	9		Store 32-oz pkg	87	0
	National 7-oz box	177	0		National 32-oz pkg	127	0
					National 16-oz pkg	130	0
				Red kidney beans	Store 16-oz pkg	98	0
					National 16-oz pkg	112	1
				Split peas	Store 16-oz pkg	109	1
					National 16-oz pkg	125	0

See footnotes at end of table.

Continued

Cost of packaged foods compared to bulk foods--Continued

Food item	Brand type and size of packaged food	Cost of packaged food as a percentage of bulk <sup>1</sup>		Food item	Brand type and size of packaged food	Cost of packaged food as a percentage of bulk <sup>1</sup>		
		Mean	Standard deviation			Mean	Standard deviation	
Nuts:				Herbs and spices:				
Blanched peanuts	Store 10- to 12-oz pkg	155	3	Parsley flakes	Store 1-oz bottle	159	0	
	National 24-oz can	<sup>2</sup> 165	7		National 0.50-oz bottle	233	18	
	National 4-oz pkg	<sup>2</sup> 165	23		Store 0.25-oz tin	383	33	
	National 10- to 12-oz pkg	170	< 1		National 0.25-oz tin	438	0	
	National 12-oz can	<sup>2</sup> 181	9		National 0.25- to 0.50-oz decorative glass bottle	587	< 1	
	Store 12-oz can	187	0	Oregano leaves	Store 2.25- to 2.75-oz bottle	193	0	
	National 16-oz can	190	5		National 2.25- to 2.75-oz bottle	251	0	
	National 6.5-oz can	247	< 1		National 1.37- to 1.5-oz bottle	294	18	
Walnut halves and pieces	National 8- to 10-oz pkg/can	121	0		Store 0.50-oz bottle/tin	582	0	
	Store 10-oz pkg	133	0		National 0.50 oz bottle	614	16	
	National 16-oz can	137	0	National 0.49- to 0.50-oz decorative glass bottle	668	0		
	National 3- to 4-oz pkg/can	142	7	Minced onions	Store 3.5-oz bottle	207	0	
Pecan halves	Store 10-oz pkg	102	0		National 4.25-oz bottle	211	14	
	Store 6-oz pkg	113	0		Store 4.25-oz bottle	212	0	
	National 2.25- to 3-oz pkg	<sup>2</sup> 146	26		National 1.5-oz bottle	418	0	
Slivered almonds	Store 6-oz pkg	156	2		National 1.62- to 1.9-oz decorative glass bottle	461	3	
	National 2- to 2.5-oz pkg	220	3	Ground cinnamon	Store 4-oz tin	239	0	
Dried fruit:					National 1.87-oz tin	248	9	
Seedless dark raisins	Store 15-oz pkg/box	111	4		National 4-oz tin	261	0	
	Store 32-oz pkg	117	< 1		National 1.12-oz tin	304	0	
	National 15- to 16-oz pkg/box	118	8		Store 1.12-oz tin	314	24	
	National 24-oz can	124	4		National 1.62- to 1.9-oz decorative glass bottle	482	< 1	
	Store 9-oz pkg (snack-paks)	191	13	Snacks:	Corn chips	Store 10- to 11.5-oz pkg	104	17
	National 9-oz pkg (snack-paks)	192	21			National 15.5-oz pkg	190	< 1
	Store 7-oz pkg (mini-paks)	242	20			National 10- to 11.5-oz pkg	204	2
	National 7-oz pkg (mini-paks)	256	29			National 8-oz pkg	205	15
Pitted prunes	National 16-oz pkg	100	0			National 6-oz pkg (snack-paks)	296	9
	National 12-oz pkg/box	<sup>2</sup> 118	< 1	Oatmeal cookies	Store 10- to 14-oz pkg	<sup>3</sup> 98	--	
Apricot halves	Generic 6-oz pkg	112	0		Store 18-oz pkg	<sup>2</sup> 101	5	
	Store 6-oz pkg	122	0		National 10- to 14-oz pkg	112	7	
	National 6-oz pkg	130	11		National 6-oz pkg	198	16	

<sup>1</sup> Values represent price collections for a 3-week period in 3 Washington, DC, area supermarkets in spring 1985 and have been weighted to reflect each supermarket's share of sales in the Washington metropolitan area. Not all brand types and sizes of each food item were available in all 3 supermarkets. Most values are based on 6 to 9 observations. Those based on only one observation are so indicated. A standard deviation of zero usually represents 3 observations within 1 store, demonstrating within-store price stability over the 3-week data collection period.

<sup>2</sup> "Special" price(s) included in computation of mean and standard deviation.

<sup>3</sup> Value based on only 1 observation.

Moreover, some large retail chains manufacture their own private label products, which helps reduce transportation and distribution costs (4).

In cases where the cost of a store brand could be compared with that of a national brand in the same package size within a supermarket (153 observations), the store brand cost less than the national brand 91 percent of the time, resulting in an average cost savings of 19 percent. This finding is similar to results obtained in a national survey conducted for the Private Label Manufacturers Association (PLMA) in December 1984 (11). In the PLMA study, which included 23 of the most heavily purchased food items, purchasing a store brand rather than a national brand resulted in a mean savings of 22 percent.

In 1983 USDA's Economic Research Service (ERS) conducted a cost study based on data from a 1980 USDA survey of supermarket prices in Washington, DC (4). In the ERS study, the cost of national brands was compared with that of top-line private labels for 34 food items. National brands classified as "warehoused dry groceries" (the same types of products as many of the items in this study on bulk foods) averaged about 28 percent higher in cost than comparable private label items.

## IMPLICATIONS

In this study, most bulk foods were less costly than packaged food products. Some packaged food forms cost up to 6 to 7 times as much as the same food in bulk. A few items, however, were more expensive in bulk than in one or more packaged forms--generic, store, or specially priced national brand. These results demonstrate that comparative cost shopping is a necessity, even with bulk foods. Consumers might consider quickly browsing through the bulk foods section before shopping, jotting down prices of items needed, then comparing them with unit prices of packaged items during shopping.

In making food purchase decisions, shoppers should be aware of both the advantages and drawbacks of bulk foods. The following are some considerations:

### On the positive side--

- Food quantity can be tailored to needs. Waste is thereby reduced, and there is less chance of a product becoming stale before it is used up.
- Shoppers can purchase and sample small amounts of products they might be reluctant to try if offered only in packaged forms providing a larger quantity, typically at a higher price.
- Shoppers can see what is being purchased and do not have to rely on pictures, as with many items packaged in opaque materials.
- The "self-service" feature of bulk foods appeals to many shoppers.
- Bulk foods often cost less than packaged foods, yet are likely to be of name brand quality. Most supermarket operators stress the quality of their bulk items (6).

### On the negative side--

- Bulk foods lack the protection provided by commercial packaging and may, thereby, become contaminated unless management and consumers together assume a responsible role. Management has an obligation to establish sanitary practices and carefully supervise bulk food operations. Consumers have an obligation to exercise sanitary practices, to use food dispensing utensils correctly, and to supervise their children in the bulk foods section of the supermarket.
- Bulk food products usually do not carry open dating or nutrition labeling, whereas many of their packaged counterparts do.
- Although ingredient labeling may be provided on bulk food bins, shoppers have no permanent record as they do with most packaged food products.
- Some products may not lend themselves to lengthy storage in the plastic bags provided at the supermarket; airtight containers may be required for proper storage. Some shoppers may not have a supply of such containers. Moreover, purchasing special containers may defeat the cost advantage of bulk foods.
- Selecting and bagging bulk foods takes more time than purchasing packaged food items. Moreover, repacking foods at home may be time consuming.



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## Second Edition of Dietary Guidelines Available

The second edition of Nutrition and Your Health--Dietary Guidelines for Americans, prepared jointly by the USDA's Human Nutrition Information Service and the U.S. Department of Health and Human Services, is available from the following sources:

### Single free copy:

- Dietary Guidelines  
Consumer Information Center  
Pueblo, CO 81009
- County Extension Office  
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### Small quantity orders:

- Human Nutrition Information Service  
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USDA, Room 536  
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## Some New USDA Publications

The following is for sale from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, 202-783-3238.

- Farm Income by Type of Farm, 1982 and 1983. 1985. Stock No. 001-019-00388-0. \$1.50.

Single copies of the following are available from the U.S. Department of Agriculture Economic Research Service, Room 208, 1301 New York Avenue NW., Washington, DC 20005-4788.

- Financial Characteristics of U.S. Farms. January 1985. AIB 495.

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# Consumer Prices

*Consumer Price Index for all urban consumers [1967 = 100]*

Group	Unadjusted indexes			
	Nov. 1985	Oct. 1985	Sept. 1985	Nov. 1984
All items .....	326.6	325.5	324.5	315.3
Food .....	311.0	309.8	309.9	304.1
Food at home.....	296.6	295.3	295.6	292.4
Food away from home.....	351.3	350.3	349.9	337.7
Housing .....	355.0	354.4	353.8	340.9
Shelter.....	391.3	389.1	386.9	368.9
Rent, residential .....	271.7	269.9	267.7	254.8
Fuel and other utilities .....	392.1	395.6	400.5	387.5
Fuel oil, coal, and bottled gas .....	641.6	615.3	601.7	626.9
Gas (piped) and electricity.....	440.5	453.9	466.5	444.7
Household furnishings and operation.....	248.9	248.4	247.1	244.2
Apparel and upkeep .....	211.2	211.1	209.6	205.2
Men's and boys' .....	203.6	203.2	201.5	197.8
Women's and girls'.....	176.5	177.9	176.1	170.4
Footwear .....	215.5	212.3	210.9	212.9
Transportation .....	323.2	320.9	319.7	316.1
Private.....	317.0	314.7	313.6	310.8
Public.....	412.8	411.5	408.0	391.8
Medical care.....	413.0	410.5	408.3	387.5
Entertainment .....	269.0	268.4	266.8	259.0
Other goods and services.....	335.3	334.9	333.3	316.5
Personal care.....	285.4	285.0	284.1	276.3

Source: U.S. Department of Labor, Bureau of Labor Statistics.



## **Highlights**

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**Federal Data Sources**

**Terms in Family Financial Planning**

**"Newer" Frozen Plate Dinners and Entrees**

**Bulk Foods**